EVOLUTION OF THE NAVY SUPPLY SUPPORT ORGANIZATION

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LIST OF ABBREVIATIONS AND ACRONYMS

ADP	Automatic Data Processing
APA	Appropriation Purchases Account
ASO	Aviation Supply Office
BUAER	Bureau of Aeronautics
BUDOCKS	Bureau of Yards & Docks
BUMED	Bureau of Medicine & Surgery
BUORD	Bureau of Ordnance
BUPERS	Bureau of Naval Personnel
BUSANDA (NAVSUP)	Bureau of Supplies & Accounts
BUSHIPS	Bureau of Ships
BUWEPS	Bureau of Naval Weapons
CNO	Chief of Naval Operations
DOD	Department of Defense
DSA	Defense Supply Agency
ESO	Electronics Supply Office
FMSO	Fleet Material Support Office
FSO	Fuel Supply Office
GSSO	General Stores Supply Office
ICP	Inventory Control Point
INAS	Industrial Naval Air Station
M&DSO	Medical and Dental Supply Office
MCAS	Marine Corps Air Station
MISA	Military Industrial Supply Agency

MMSA	Military Medical Supply Agency
NAS	Naval Air Station
NASD	Naval Aviation Supply Depot
NAVAIR	Naval Air Systems Command
NAVLOGSIP	Navy Logistic Support Improvement Plan
NAVSHIP (BUSHIPS)	Naval Ship Systems Command
NAVSUP	Naval Supply Systems Command
NFD	Navy Fuel Depot
NMMO	Navy Medical Material Office
NSA	Navy Stock Account
NSC	Naval Supply Center
NSD	Naval Supply Depot
NSY	Naval Shipyard
O&M	Operations and Maintenance
SDCP	Supply Demand Control Point
SECNAV	Secretary of the Navy
SMOA	Single Manager Operating Agency
SPCC	Ships Parts Control Center
SWSD	Special Weapons Supply Depot
Y&DSO	Yards and Docks Supply Office

INTRODUCTION

The Navy Supply System has been in existence for some twenty-one years, but after all this time there is still no precise definition of just what it is. Indeed, a recent Navy publication on the subject states candidly that "there is no Navy Supply System in the sense of an organization with a structure of command and inherent responsibility."[1] This is a rather startling statement to the uninitiated. This publication goes on to state:

> But there is, of course, a system by which the Navy is supplied -- a system which has evolved through the years, adapting itself to the changing requirements demanded both by the application of technological advance and the acquisition of new responsibility. After the manner in which men formalize their actions, it has become known as the Navy Supply System.[2]

Most efforts to describe the Navy Supply System have concentrated on how it functions rather than how it is organized, simply because of the absence of any unified organizational structure. The aforementioned publication is no exception; it resulted from the effort of a study group which had as its task the definition of the Navy Supply System. But this task of defining a virtual phantom proved to be an elusive one and the study group redirected its effort to the writing of a book which

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[1]U.S., Department of the Navy, Bureau of Naval Personnel, Supplying the Navy (NAVPERS 10487), 1967, p. 1.

[2]Ibid.

describes how the Navy is supplied.

The focus of this paper is on organization, but it purposely avoids any attempt to describe the organization of the Navy Supply System per se, for the reason already mentioned. Of course there are identifiable organizational elements which play specified roles in the process of supplying the Navy, even though there is no discrete organizational bond which holds them together. To avoid the aura of attempting to define the undefinable, this paper uses the term "Navy supply support organization" rather than the formalized title Navy Supply System. It is hoped that this will permit the necessary latitude which may otherwise be unattainable if an attempt were made to stay within the rigid bounds of the Navy Supply System, whatever that may be.

The Problem

If there is a single word which best characterizes the Navy supply support organization during the past twenty-five to thirty years, that word must be "change." Many of these changes can be attributed to the pressure of external events such as a major war and the unification of many supply matters under the Defense Supply Agency. But many have been prompted by internal pressures, some of which can be traced to the vague definition of the Navy Supply System and the resulting fragmented authority and responsibility. Control of certain segments of the supply system has been the subject of continuing debate. This "tug-of-war" has generated a plethora of studies and has resulted in several changes in responsibility, with still other potential changes in the offing.

The purpose of this study is to trace the historical development of the Navy supply support organization in the hope that insight into the past will facilitate evaluation of the present. In particular the study will:

1. review the system of supply which existed during World War II

2. examine the organization for Navy supply support at the time the integrated Navy Supply System was created (1947)

3. describe and analyze the more important changes which have taken place since 1947

4. identify and evaluate the reasons why these changes have occurred, and

5. appraise the current Navy supply support organization and the prospect for further modification.

Sources of Information

The accomplishment of this thesis was largely a library research effort. The vast majority of historical information was obtained from the NAVSUP library, which contains a veritable wealth of material on past events affecting the Navy Supply System and the Bureau of Supplies and Accounts. Information about the changes which have transpired was obtained primarily from the official files of NAVSUP's Planning Division, supplemented by library research and the personal experience of the author. Many of the thoughts expressed about the current organization grew out of informal discussions with personnel of the NAVSUP Planning Division, to whom the author is indebted.

Assumptions and Limitations

In developing the story of the Navy supply support organization it has been useful to limit discussion in several respects in order to reduce complexity and thereby promote clarity. Specifically, the following limitations have been observed:

1. Attention is focused on the Naval Supply Systems Command (NAVSUP) and its predecessor the Bureau of Supplies and Accounts (BUSANDA), along with their field organization and other major operational participants in the supply process. In so doing, the policy making role of superior Navy commands is not described, including the role of the Chief of Naval Operations in what has in the past been termed "consumer logistics."

2. The discussion of NAVSUP's responsibilities is limited to matters relating to the supply system, with intentional omission of related responsibilities in areas such as accounting, transportation and field purchasing.

3. Overseas activities are excluded from discussion, despite their obvious importance. The purpose of this study can be adequately served by limiting the discussion to activities in the continental United States.

4. Only major participants in the supply support scheme are given emphasis. Indeed almost every ship and shore activity in the entire Navy has some part to play in the supply story, but most are either customers or are relatively inconsequential as elements of the support organization.

5. A description of supply functions is purposely

avoided except as is necessary for clarity in describing organizational matters.

6. While some use has been made of theoretical considerations, no attempt has been made to explore the subject of organization theory in depth.

In addition to staying within the constraints noted above, this paper assumes a basic familiarity with the Navy's bureau organization. Beyond this, an attempt has been made to keep the discussion in relatively non-technical terms to facilitate understanding by those only casually familiar with the Navy supply support organization.

CHAPTER I

SYSTEMS OF SUPPLY PRIOR TO 1947

Pre-War Situation

In the years before World War II the process of supply support of the Navy was relatively routine and uncomplicated. The pre-war Navy was comparatively small and the ships and aircraft were not too complicated in terms of specialized equipment. There were only about 75,000 items of supply to contend with, and very few of these were of a technical nature. The peacetime environment permitted adherence to standardized procedures, with a high degree of centralized control over procurement and distribution.[3]

The Bureau of Supplies and Accounts (BUSANDA)[4] was responsible for the procurement and distribution of what was termed standard stock. The concept of standard stock had evolved over a long period of reasonably static conditions; the term was used to describe replenishable material which was common throughout the Navy and for which specifications were relatively stable and the requirements well known. Included as standard stock were such things as cleaning gear, paint and office supplies as

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[3]U.S., National Military Establishment, Munitions Board, Staff Report on Materiel Distribution Systems of the National Military Establishment, June 30, 1949, pp. 12-13.

[4]A list of abbreviations and acronyms used in this report is on page vi.

well as common hardware and tools. BUSANDA was also responsible for fuel, clothing, provisions and ship's store material.

Contrasted with this were equipment spare parts, which were generally obtained along with the original equipment. Replenishments of these technical spare parts were small in volume; procurement was generally decentralized and most of these parts were obtained directly from the manufacturer. Specifications usually required the approval of the cognizant Navy technical bureau.[5]

Within BUSANDA there was a central stock control office which was responsible for the procurement and distribution of standard stock material. But this centralized control did not exist for technical material; each of the technical bureaus performed inventory control functions for the peculiar material under its cognizance. However, much of this technical material remained in the physical plant controlled by BUSANDA because of its overall responsibility for storage and transportation.[6] There were only two Naval Supply Depots (Norfolk and San Diego) in existence in the pre-war era, but these were supplemented by the storage facilities at nine Navy Yards and three aviation supply activities.[7] These latter activities generally carried material peculiar to their own needs rather than for resupply of other activities.

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[5]National Military Establishment, Staff Report on Materiel Distribution Systems . . . , p. 12.

[6]Ibid., pp. 12-13.

[7]U.S., Department of the Navy, Bureau of Supplies and Accounts, History of the Bureau of Supplies and Accounts in World War II: A Synopsis, 1947, p. 97.

The centralized control of standard stock material in the supply system can be attributed to the strong centralized procurement responsibility of BUSANDA. Entry of items into the system was closely regulated by virtue of this control over procurement. Field activities obtained replenishment by forwarding requests to BUSANDA on a periodic basis. These requests were consolidated in the Bureau and necessary schedules were prepared for procurement. The schedules were used to obtain bids from contractors, and after completion of the contracts the material eventually arrived at its destination.[8]

Effect of World War II

This standardized, business-as-usual procedure worked well during peacetime, when operational demands were minimal. But BUSANDA was ill prepared for the tremendous requirements imposed upon the supply system by our entry into World War II. As stated by Captain H. C. Lassiter at the 1947 Conference of Supply Corps Officers:

> The need for change from the long established procedures was not apparent . . . until the full impact of the war hit us more or less unexpectedly and found us incapable of coping with the tremendously increased requirements for literally millions of newly developed technical items.[9]

And Admiral Julius Furer, in his history of the Administration of the Navy Department in World War II, noted that "BUSANDA had visualized its wartime role as simply an expansion of its

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[8]U.S., Department of the Navy, Bureau of Supplies and Accounts, Conference of Supply Corps Officers, Sept. 29 through Oct. 4, 1947, p. 79.

[9]Ibid., p. 80.

traditional peacetime functions."[10] He states that, although BUSANDA had conceived of its primary task as one of procurement coordination, insufficient action was taken to implement this assumption.

The inevitable result was a change in the Navy's procurement procedure "because of the sudden, urgent and overwhelming demands of wartime."[11] The sheer magnitude of wartime supply requirements was in itself staggering, but in addition there occurred a technological explosion which added severe complications. This is exemplified by the increase in the number of items in the supply system from 75,000 prior to the war to about 2,400,000 by the end of the war.[12] Of the latter figure, approximately 75 per cent were non-standard technical items.

The inability of BUSANDA to cope with the volume and technical complexity of the burgeoning wartime requirements resulted in a splintering of procurement responsibilities. Each of the technical bureaus (Ships, Ordnance, Aeronautics) began to develop special systems of supply for each new category of material introduced into the system. And needless to say, under the pressure of wartime conditions, these new systems were not constructed to conform to a common pattern nor to provide a single uniform system of supply to the Navy. Each was designed

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[10]Julius A. Furer, Administration of the Navy Department in World War II, (Washington: U.S. Government Printing Office, 1959), p. 440.

[11]Ibid.

[12]National Military Establishment, Staff Report on Materiel Distribution Systems . . . , p. 13.

to meet the immediate requirements of the situation.[13]

So where it should have been expected that BUSANDA would become the core of a centralized supply system for the entire Navy, in practice the opposite occurred. As stated in the History of BUSANDA in World War II:

> Control over procurement and its auxiliary processes was broadcast throughout existing Bureaus and offices, and in many instances new offices were established to carry out extensions of normal activity.
>
> . . . . . .
>
> The effect was not only to circumvent the Bureau at the beginning of the supply process, i.e., procurement, but also to duplicate its field functions of storage, transportation and issue. Each new agency developed its own procedures to handle its special materials right down the line from purchase to use, resulting in not one, but a multitude of Navy supply systems.[14]

All told there were some thirty different distribution systems of various composition which were in existence by the end of the war.[15] Theoretically each of the bureaus was buying only its own peculiar technical items, with BUSANDA still responsible for standard stock. But the technical bureaus, unbeknownst to one another, were buying materials which should have been standard stock under the misapprehension that they were specialized. This was an inevitable consequence of the multiple supply systems in existence and the result was a great deal of duplication. Many items with identical end use were entering into the stream of supply under slightly different specifications and different manufacturer's part numbers. This

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[13]BUSANDA, Conference of Supply Corps Officers, 1947, p. 2.

[14]History of BUSANDA in World War II, p. 2.

[15]National Military Establishment, Staff Report on Materiel Distribution Systems . . . , p. 13.

produced a situation in which no single office in the Navy knew which items had been procured, what they were for, where they were stocked or in what quantities.[16]

In recapping these circumstances, the History of BUSANDA in World War II concluded that:

> 1. No single supply system existed in the Navy in World War II.
>
> 2. The Navy Department's bureau structure did not accommodate simple expansion; wholesale . . . reorganization was necessary to fulfill the needs of logistics.
>
> 3. Organization, in effect, of a multitude of supply systems brought about intra-Navy competition for the same end items . . .[17]

It is against this background that postwar developments must be considered. The problems occasioned by the existence of separate systems were recognized during the course of the war, but it was not practical to make wholesale changes at that time.

Field Activities

Before proceeding with the changes which occurred after the close of the war, let us introduce the supply field activities into our story. These activities not only played an important part in the wartime supply process, but they are also the subject of much of the ensuing discussion in this paper. Of course there was a tremendous expansion in the number and size of field activities during the war, along with virtually everything else connected with the war effort.

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[16] History of BUSANDA in World War II, p. 3.

[17] Ibid., p. 5.

Historically, most Navy shore activities came into existence as an extension of and a part of the natural growth of the bureaus.[18] For example, the Bureau of Aeronautics established and operated air stations; the Bureau of Ordnance established and operated ordnance plants and ammunition depots; and Bureau of Supplies and Accounts established and operated supply activities. At the peak of World War II there were about 7,000 field activities operated by the Navy Department, including some 850 whose primary mission was procurement or supply.[19] Of course most of these activities were relatively small and had specialized missions; our concern in this study is with the comparatively few major activities which predominated in size and importance.

As was previously mentioned, there were only two Naval Supply Depots in the pre-war era -- those at Norfolk and San Diego. But the rumblings of war in Europe and the beginning of the Navy's expansion in 1939 set the wheels in motion for rapid development of additional storage facilities. Table 1 shows the major depots under BUSANDA's control at the end of the war.[20]

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[18]U.S., Department of the Navy, Review of Management of the Department of the Navy, Study 6, Facilities Management Study, Oct. 26, 1962, Vol. III, p. 18. This study is one of those in the group commonly known as the Dillon Report.

[19]Furer, p. 519.

[20]Data for this table were obtained from the official files of Naval Supply Systems Command, supplemented by History of BUSANDA in World War II and Report of Survey of Activities Under BUSANDA Cognizance, Jan. 15, 1947.

TABLE 1

MAJOR DEPOTS UNDER BUSANDA CONTROL
AT THE END OF WORLD WAR II

Name	Year Established
East Coast	
NSD Norfolk, Va.	1927[a]
Cheatham Annex	1943
NSD Bayonne, N. J.	1942
NSD Newport, R. I.	1942
Gulf Coast	
NSD New Orleans	1942
West Coast	
NSD San Diego, Calif.	1922
NSD Oakland, Calif.	1941
Stockton Annex	1945
Aviation Supply Annex	1942
NSD Seattle, Wash.	1942
NSD San Pedro, Calif.	1942
Torrance Annex	(b)
Inland	
NSD Mechanicsburg, Pa.	1942
NSD Scotia, N. Y.	1943
NSD Clearfield, Utah	1943
NSD Spokane, Wash.	1943
Specialized	
Naval Aviation Supply Depot, Norfolk, Va.	1941
Naval Aviation Supply Depot, Philadelphia, Pa.	1943
Naval Clothing Depot, Brooklyn, N. Y.	(b)

(a)Originally established in 1919 as Naval Supply Station, Norfolk.

(b)Dates of establishment could not be determined for these activities. However, they were established some time during World War II.

The need for Navy coastal depots is self-evident. The four inland depots were constructed both for reasons of dispersal and to alleviate overcrowded conditions at coastal locations. The crowding at coastal storage sites necessitated the use of multi-story buildings which were unsuited for modern storage methods and easy handling of large quantities of supplies. The inland locations were chosen with the objective of their capability to back up the coastal system. They were strategically located on main railroad lines and were laid out and constructed where room was available for properly designed single story warehouses. They were designed so that warehouse operations would be facilitated by taking advantage of modern storage methods and large scale use of materials handling equipment.[21] Together with Stockton Annex, which was similarly designed, these five efficient storage facilities provided nearly 30,000,000 gross square feet of storage space. This was more than the combined total of all of the coastal depots.

In addition to the NSD's, maximum use was also made of the supply facilities of non-BUSANDA activities. Principal among these were the Navy Yards and major Air Stations, along with assorted other activities such as Ammunition Depots, Submarine Bases and Training Centers. Of course these non-BUSANDA activities were used extensively by their own parent bureaus for distribution of technical material in the several supply systems which they created during the war.

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[21]National Military Establishment, Staff Report on Materiel Distribution Systems . . . , p. 57.

There is one wartime development which stands out in the annals of Navy supply -- the development of the supply-demand control point (SDCP) concept. An SDCP was not responsible for physical storage of material; rather its responsibility was for the control of material through centralized determination of requirements, procurement and distribution through established storage activities. The Aviation Supply Office (ASO) in Philadelphia was the first activity of its kind, with responsibility for world-wide control of aeronautical materials. It was somewhat of a hybrid organization which brought together the technical expertise of the Bureau of Aeronautics (BUAER) and the supply expertise of BUSANDA. ASO was an outgrowth of the Supply Department at the Naval Aircraft Factory in Philadelphia, which during the 1930's had been given progressively greater authority over the distribution of aeronautical stores. The demands of war and the rapid technological developments in aircraft design required a responsive supply support organization to cope with the complications of supplying the aeronautical organization. ASO met this challenge; it assumed the responsibility for procuring and distributing technical aeronautical material under an integrated system that recognized the need for special treatment of the air arm.[22] The ASO was deemed to be a model of inter-Bureau cooperation which established a pattern destined to be followed for other major categories of Naval material. Similar offices were established for ships' parts and ordnance material during the war, but their state of development did not approach that of ASO.

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[22] History of BUSANDA in World War II, pp. 22-25.

Summary

In the pre-World War II years BUSANDA played a dominant role in the supply support of the Navy by virtue of its centralized control of the procurement and distribution of standard stock. The Navy was relatively small and there were not many complicated equipments to support. The tempo of operations permitted the use of standardized, albeit time-consuming, methods of central procurement by BUSANDA.

The enormous and urgent demands of wartime proved to be more than BUSANDA's cumbersome peacetime system could cope with. The war also produced rapid advances in technology, thereby complicating the supply problems, which now included the support of a vast array of technical equipment. In view of these problems, technical bureaus gained the responsibility for procuring and distributing material to support their own peculiar equipment. The result was fragmentation of the supply system into some thirty separate supply systems, with the inevitable duplication of many common items of supply. No single office in the Navy knew what was being procured, where material was located, or what it was for.

The war also brought about a tremendous expansion of the Navy shore establishment. Supply activities multiplied in number and size; major storage activities under BUSANDA's cognizance increased from just two in the 1930's to some nineteen by the end of the war. Large inland supply depots came into existence for the first time. In addition, extensive use was made of

supply facilities at activities such as Navy Yards and Air Stations, whose primary mission was other than supply.

World War II also produced an innovation in supply management, the creation of the first supply-demand control point. ASO grew out of a marriage between technical functions and supply functions, the responsibilities of two separate Navy bureaus. The concept was deemed so successful that ASO was to be used as a model for additional ICP's in the future.

CHAPTER II

THE INTEGRATED NAVY SUPPLY SYSTEM

Recognition of the Need

The difficulties occasioned by the Navy's multiple supply systems during the war were widely recognized. The officers who were involved with operating these systems certainly were aware of the need for change, notwithstanding the fact that little could be done because of the pressure of events while the war was in progress. Captain Lassiter had this to say on the subject:

> Throughout the war Supply Corps officers, who were in a position to observe the trends, were giving considerable thought and effort to the development of a single Navy Supply System, in which BUSANDA would play its rightful role as the business managers and supply administrators of the Navy, and the technical bureaus would contribute their part by supplying the required technical knowledge and effort.[23]

The problem was also recognized in the reports of several study groups, the most notable of which were the following:

1. Strauss-Draper Report, 1944. This group was primarily concerned with the extent and character of Army-Navy coordination of procurement, but it of course had to examine procedures within each service. It concluded that there was a definite need for more comprehensive and effective coordination

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[23]BUSANDA, Conference of Supply Corps Officers, 1947, p. 80.

in the procurement field.[24]

2. Eberstadt Report, 1945. This report addressed itself primarily to the broader questions of unification of the Armed Services and national security, but it also spoke specifically to the fields of procurement and logistics. It cited as a basic weakness in Navy logistics the absence of centralized control mechanisms due to the lack of a standard classification of naval material. (This, of course, was brought about by the multiple, uncoordinated supply systems.) Without such a standard classification, the report states that the Navy was seriously handicapped in its attempts to establish adequate inventory control, establish control over the use of storage and shipping space and port utilization, and establish comprehensive distribution plans. The Eberstadt Board felt that one of the major obstacles to be overcome to achieve a greater degree of coordination was the traditional and deep-rooted desire of the Naval bureaus for autonomy.[25]

3. Hancock Report, 1946. Perhaps one of the more cogent reports was that of the Hancock Committee, which was appointed on October 24, 1945 by the Secretary of the Navy for the express purpose of studying the Navy's supply system. This report stressed the necessity for a sound organizational framework which, in time of war, can be built upon rather than being built around. The report states that "in the war just ended many

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[24]U.S., Congress, Senate, Unification of the War and Navy Departments and Postwar Organization for National Security, 79th Cong., 1st Sess., 1945, pp. 115-116. This is a Senate Committee Print of the report commonly known as the Eberstadt Report.

[25]Ibid., pp. 116 and 128.

changes were made in organizational set-up and in powers granted to different agencies, resulting in frequent overlaps of authority and unnecessary confusion as to the responsibility for carrying out different parts of the program."[26]

At war's end the weight of evidence was clearly in favor of remodeling and revitalizing the Navy's supply system. The many deficiencies in the multiple wartime systems could no longer be tolerated. The Eberstadt Report stated it well:

> The great resources and productive power of this country permitted us to afford the luxury of inefficient procedures this time. It may not be possible again. It would seem imperative, therefore, that we take measures which will hereafter assure better teamwork and will enable us to achieve the full benefit of all of our resources.[27]

Birth of a Plan

After the termination of the war it was only a matter of months before action was underway to bring out the changes which were so badly needed. In response to representations of the Chief of the Bureau of Supplies and Accounts, the Chief of Naval Operations (CNO) directed BUSANDA to conduct an exhaustive study and present an Integrated Supply Plan.[28] The initial directive, issued on January 5, 1946, established the principles considered necessary for the development of an integrated supply

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[26]U.S., Department of the Navy, Report of the Special Committee Appointed by the Secretary of the Navy to Study the Navy's Supply System, April 1946, pp. 3-4.

[27]Eberstadt Report, p. 29.

[28]U.S., Department of the Navy, Bureau of Supplies and Accounts, "The Navy Supply System," Monthly Newsletter from the Bureau of Supplies and Accounts, XIII (October 1949), p. 8.

system.[29] This was followed by a second letter on February 21, 1946 which directed BUSANDA to proceed with the development of the plan.[30]

In the ensuing months an intensive study effort was undertaken, led by a BUSANDA committee with the participation of representatives from other bureaus and offices. The completed plan was submitted to CNO on June 24, 1946.[31] There followed a series of discussions and meetings at which points of disagreement were worked out to the extent possible. The modified plan was then submitted to the Secretary of the Navy, who on February 14, 1947 approved the plan "in principle as forming a sound basis for the coordination and further development of the supply system of the Navy."[32]

A thorough review of this plan is certainly unnecessary for the purpose of this study; however, since it is the cornerstone upon which the present Navy Supply System was built, mention must be made of those parts which are relevant to the organizational fluctuations which will be examined in this study. In particular let us review certain of the precepts, theses and recommendations of the study.

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[29]Letter from the Chief of Naval Operations, serial 0078P411, dated January 5, 1946.

[30]Letter from the Chief of Naval Operations, serial 300P411, dated February 21, 1946.

[31]Letter from the Chief, Bureau of Supplies and Accounts, serial L8-1(1-1)(OW), dated June 24, 1946, with enclosure entitled "A Study of an Integrated Naval Supply System."

[32]Letter from the Secretary of the Navy to the Chief of Naval Operations, February 14, 1947.

1. Precepts. The Secretary of the Navy had established certain principles to govern the control of Navy inventories. One of these was that supply-demand control points (SDCP's) should be established for all types of Navy material. (This was obviously a result of ASO's success.) In addition, CNO enunciated certain principles to govern the establishment of a Navy Supply System. Among these were:

a. Where common facilities and functions may render a more effective and economical operation, the facilities and functions concerned should be consolidated.

b. In order to lessen the likelihood of destruction by enemy attacks, major stocks should be withdrawn into the interior of the continent, and sufficient dispersal should be provided to prevent disruption of material logistics support in the event of military loss of any one activity.[33]

2. Theses. A useful summation of the theses upon which the plan was based was presented by the 1947 Conference of Supply Corps Officers. The main thesis was that the functions to be performed in the operation of any supply system can be grouped into two main divisions: supply functions and technical functions. Further, the performance of technical functions is peculiar to the particular type of material, but the supply functions are equally applicable to all types of material. It then follows that a single bureau should be charged with the performance of all of the supply functions for all types of material and that each technical bureau should be charged with performing the

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[33]BUSANDA, Monthly Newsletter, October 1949, p. 16.

technical functions applicable to the particular type of material for which it is responsible.

The next thesis upon which the supply system is based is that for any category of material the supply and technical functions must be performed in conjunction with each other. Close liaison and interchange of information must be maintained if the system if to be responsive to operational needs. This principle is, of course, embodied in the structure of an SDCP.

A third thesis was that, regardless of which bureau had technical control of the material and regardless of which control point controlled it, all material belongs to the Navy and is not the personal property of any Bureau or control point. To avoid such a proprietary claim, the plan proposed that all replenishable material be financed under a revolving fund, the Naval Stock Fund.[34]

3. Recommendations. Those recommendations which are pertinent to this study are noted below.

Recommendation 1. That the Chief of BUSANDA be charged with coordinating the operation of the supply functions of the Navy Supply System and be assigned the responsibility for the performance of the supply functions in the Navy Supply System, and be vested with the necessary authority to discharge his responsibilities, with the advice of the technical bureaus . . .

Recommendation 4. That the following "supply offices" be established by SECNAV, jointly responsible to the Chief of the technical bureau concerned and the Chief of BUSANDA, to

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[34]BUSANDA, Conference of Supply Corps Officers, 1947, pp. 81-82.

administer within the Navy Supply System the supply of the particular type of material concerned:

a. Ordnance Supply Office.

b. Yards and Docks Supply Office.

c. Medical Supply Office.

d. Ships' Parts Supply Office.

e. Electronics Supply Office.

f. Searchlight Supply Office.

g. Gyro Supply Office.

h. Submarine Supply Office.

i. General Supply Office.

j. Provisions Supply Office.

k. Ship's Store Supply Office.

l. Clothing Supply Office.

m. Aviation Supply Office.

Changes, including additions, to the above list of "supply offices" should be made as experience indicates desirable.

Recommendation 5. That categories of material of a replenishable nature shall be included in the Navy Supply System as jointly decided upon by the cognizant technical bureau and the Chief of BUSANDA.

Recommendation 6. That the procurement of all naval material included in the Navy Supply System will be financed by the Naval Stock Fund. (NOTE: This recommendation was not approved as written but was approved with revised wording to the effect that replenishable items in the Navy Supply System would be so financed.)

Recommendation 7. That the field supply activities be organized as follows:

a. Major fleet and overseas supply support activities -- Naval Supply Centers.

b. Other major supply activities -- as Naval Supply Depots, Naval special supply depots or supply departments as appropriate.

Recommendation 8. That specific supply activities be established as follows:

a. Naval Supply Center, New York.

b. Naval Supply Center, Norfolk.

c. Naval Supply Center, Oakland.

d. Naval Supply Center, Puget Sound.

Recommendation 9. That a comprehensive plan covering a period of ten years be prepared to cover the geographical decentralization of the facilities required . . .

Recommendation 10. That the principles governing the dispersal of local supply facilities be developed by BUDOCKS with the advice of the Chief of BUSANDA and the technical bureaus . . .

Recommendation 14. That the system of supply, the development of which is proposed herein, be known as "The Navy Supply System" . . .[35]

All of the aforementioned recommendations were approved by SECNAV with the exceptions that recommendations one and four were not applicable to BUMED at that time, the wording of recommendation six was modified as noted above, and recommendations

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[35]BUSANDA, Monthly Newsletter, October 1949, p. 25.

four and eight were approved subject to revision of the lists of activities as circumstances dictate. BUSANDA was charged with the implementation of certain basic elements of the plan.

To help understand the organizational relationships created by the Navy Supply System, Figure 1 presents the organization chart as it was envisioned at the time of SECNAV's approval. The chart has been divided into three major levels: the top management level, bureau level and operating level. The top management level was responsible for making broad material policies and reviewing the performance of the overall operation. The bureau level could be called the operating management level for it was this level which exercised detailed management control over technical and supply functions in implementation of top management's policies. The operating level consists of the various SDCP's which performed the detailed operations necessary to operate the supply system. The operating level also includes the field supply activities, but the specific organizational relationships for these activities were not given expression in the organization chart of the Navy Supply System.

Across the top of the chart are listed the various types of material included in the Navy Supply System. Each of these types of material falls under the technical cognizance of a technical bureau, and they have been appropriately grouped on the chart. The original plan envisioned the establishment of a separate SDCP for each of these major types of material, as shown on the lower portion of the chart. Note that there are two different shaded lines on the chart, one representing the technical functions and one representing supply functions. The

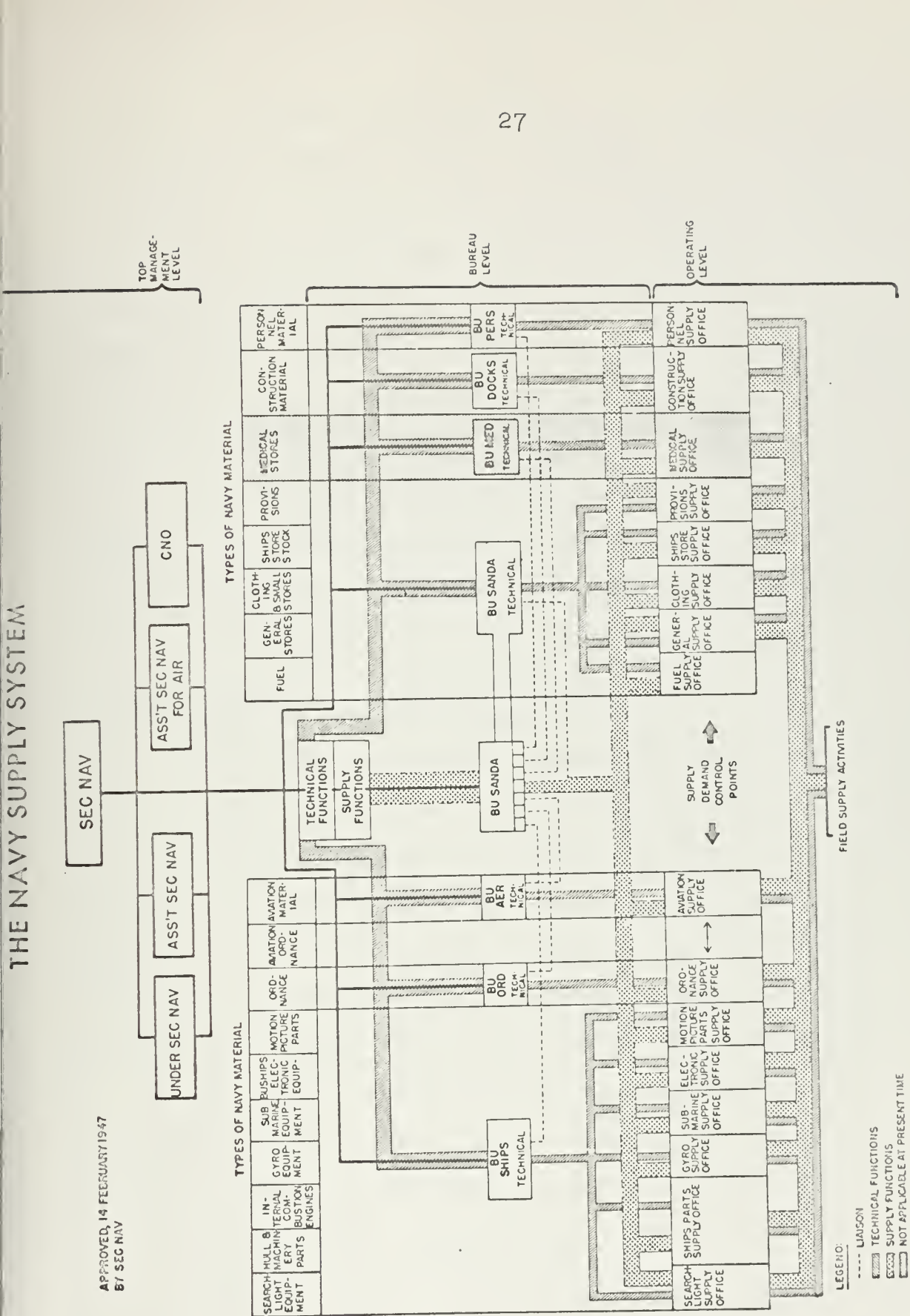

Fig. 1.--The Navy Supply System

technical functions stem from each of the technical bureaus to the appropriate SDCP's whereas the supply functions stem only from BUSANDA and extend to all control points. BUSANDA is shown twice on the chart to reflect its dual capacity as Navy-wide manager of supply functions and as the technical bureau for fuel, general stores, clothing, ship's store stock and provisions. The dotted lines represent the liaison which takes place at the bureau level.

Thus, both the technical functions and the supply functions are married together in the SDCP's to insure the proper and adequate supply of the materials under the cognizance of that control point.[36]

Implementation of the Navy Supply Plan.

Action commenced almost immediately to implement the approved recommendations of the Navy Supply Plan. Of course, as with any plan, the experience gained in the process of implementation caused some changes in thinking and resulted in modifications to the grand design. Nevertheless the framework of the fledgling system developed rather rapidly, and by September 1947 the following SDCP's were in existence:[37]

1. Aviation Supply Office, Philadelphia
2. Ordnance Stock Office, Washington
3. Ships' Parts Control Center, Mechanicsburg
4. Electronic Supply Office, Great Lakes

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[36]BUSANDA, Conference of Supply Corps Officers, 1947, pp. 82-83.

[37]Ibid., p. 93.

5. Submarine Supply Office, Philadelphia
6. General Stores Supply Office, Philadelphia
7. Clothing Supply Office, Brooklyn
8. Yards and Docks Supply Office, Port Hueneme
9. Navy Ship's Store Office, Brooklyn

Several of the originally planned SDCP's were consolidated in the interest of efficiency and economy. This resulted in five of the categories of material under BUSHIPS' technical cognizance being placed under the control of the Ships' Parts Control Center, namely: searchlight equipment, hull and machinery parts, internal combustion engines, gyro equipment and motion picture parts. In addition, it was decided not to activate the Fuel Supply Office and the Provisions Supply Office for the time being; however, the Fuel Division and Subsistence Division of BUSANDA were actually operating as SDCP's anyway. Establishment of the Personnel Supply Office was dropped from the plan.[38] And, of course, BUMED had been excepted from the plan by SECNAV, so no further thought was given to establishing a Medical Supply Office.

While the SDCP's were created in substance, much work remained to be done in molding these new organizations into a viable part of the total Navy Supply System. Each of the SDCP's initially functioned independently of each other without any coordinated control. Therefore there was a need to standardize certain elements of their operations in order to establish control coordination. In addition to the procedural matters of stock status reports and stock record cards, standardization was needed

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[38] Ibid., pp. 82-83.

in the organization of the SDCP's themselves and in their distributive organizations.[39]

The formal acceptance of the SDCP concept for all types of Navy material was undoubtedly the most profound development arising from the Navy Supply Plan. But a new concept for storage activities was also given status: the Naval Supply Center (NSC) concept. Prior to the development of the Navy Supply Plan two NSC's had been created in the Pacific area, under the command and administrative control of the fleet commander. NSC's Pearl Harbor and Guam-Saipan were established effective January 1, 1946.[40] These two supply centers were comprised of branches which stocked all types of material, including general stores, ordnance, ship's spare parts, electronics, etc. The branches were staffed with personnel having the necessary specialized knowledge of the particular type of material stocked by that branch. There was an officer in command of the NSC who was responsible for coordination of the functions of all branches to insure that the branches were integrated into a unified supply center.

The Navy Supply Plan proposed the establishment of four NSC's in the continental United States. Two of these (Norfolk and Oakland) were commissioned by the end of 1947, but establishment of the other two (New York and Puget Sound) was held in abeyance. The existing NSD's at Norfolk and Oakland formed the nucleus of the new supply centers, but in addition the NSC's

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[39] Ibid., p. 93.

[40] Letter from the Chief of Naval Operations, serial 275P411, dated December 11, 1945.

assumed the responsibility for technical materials which had been under the control of other depot-type activities in their respective areas.

The distinguishing feature of an NSC, as opposed to an NSD, was the former's broad responsibility for a wide range of material, including technical material. Organizationally the NSC's were composed of a number of component supply depots, each responsible for a particular category of material; e.g., aviation material, general stores. Each of the component depots was semi-independent and had an Officer-in Charge who was responsible for the depot's operation. However, the center organization provided services common to all of the component depots and acted to insure the integration of the several components into a coordinated, unified supply center operation.

This supply center organization followed as a corollary to the commodity breakdown of the SDCP's. The concept permitted the development of expertise in a particular commodity area and served to facilitate direct communications between a commodity manager (SDCP) and its major material outlets.[41] In brief the Naval Supply Center organization permitted decentralized operations through the component depots while at the same time retaining centralized coordination control, policy guidance and administrative direction.

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[41]U.S., Department of the Navy, Bureau of Supplies and Accounts, Appraisal of Reorganization of Naval Supply Center, Norfolk, Va., September 1960, p. 1.

Evaluation of the Plan

The plan for an integrated Navy Supply System received very favorable comments from some highly placed sources.

CNO in his letter which forwarded the plan to SECNAV for approval, offered the opinion that the plan "provides a sound and effective framework for the establishment of an efficient, economical, and flexible system of supply, capable of serving the Navy in either peace or war." The letter went on to enumerate several features of the plan which were considered noteworthy.[42]

The Secretary of the Navy, in his annual report for 1947, stated that the Navy Supply System was developed in order to take advantage of wartime experience, and that this new system "obtains and assures the characteristics of responsiveness, flexibility and economy that are essential for effective and efficient supply support."[43]

Perhaps the strongest testimonial, however, was contained in a task force report of the Hoover Commission. This task force reviewed the supply systems in the entire Federal government, and had this to say about the Navy system:

> The Navy . . . recognizes that supply problems form a common pattern, and has centralized responsibility for them in its Bureau of Supplies and Accounts. To assure a uniform supply system that meets the needs of the technical bureaus, various items are grouped into types which can be controlled

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[42]Letter from the Chief of Naval Operations, serial 1918P411, undated (about December 1946).

[43]U.S., Department of the Navy, The Annual Report of the Secretary of the Navy for FY 1947, pp. 43-44.

> from a specific supply demand control point. The maximum degree of uniformity consistent with the various types of materials is obtained under the Navy supply system.[44]

The task group had previously taken note of the fact that the Navy Department was the only executive agency wherein the various elements of the supply system were organized and administered as a separate and distinct function. The group was sufficiently impressed with the Navy system to recommend that the Army and Air Force adopt a similar system.[45]

In spite of these kudos, the Navy Supply Plan was not without its shortcomings. Certain of these may be identified at this point.

For one thing, it is evident that the goals of the plan have not been completely realized and perhaps never will be. In particular, BUSANDA has not achieved the position envisioned by the first recommendation of the plan. There appears to be little doubt that BUSANDA has had the responsibility for co-ordination of supply functions; but the responsibility for performance of the supply functions in the Navy Supply System, together with the necessary authority to discharge this responsibility, have been notably lacking in some important instances. Without developing this point further at this time, let us cite some of the factors which may have had a bearing on the matter:

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[44]Russell Forbes, Task Force Report on the Federal Supply System (Appendix B), report prepared for the Commission on Organization of the Executive Branch of the Government, January 1949, p. 64.

[45]Ibid., pp. 68-69.

1. The Navy Supply Plan makes no mention of the organizational relationships pertaining to field supply activities. For example, what degree of authority does BUSANDA have over the supply department of a Naval Shipyard or Naval Air Station? The plan specifically recognizes, in recommendation seven, that supply departments would be one form of organization integral to the system.

2. The plan does not define the extent to which BUSANDA should be responsible for performance of supply functions nor the type and level of authority necessary for this purpose.

3. The plan is not specific as to the types of material to be included in the Navy Supply System. The only criterion indicated was that material of a replenishable nature shall be included, but this was subject to negotiation between the technical bureau and BUSANDA.

The delineation of these vague areas in the plan is not meant to imply that the drafters lacked foresight. In all probability this was the extent to which they could go and still obtain the necessary concurrence of the technical bureaus. As was previously noted, the Eberstadt Board felt that one of the major obstacles to be overcome was the traditional and deep-rooted desire of Navy bureaus for autonomy. Had the plan been made more specific, it may have become too unpalatable for the technical bureaus and could have resulted in complete failure. As it developed, the Navy Supply Plan did not solve all supply problems; but it did provide a solid foundation for a system which was a marked improvement over its predecessors. At the time of its approval it was estimated that implementation would require a

full ten years, a period of time during which many wrinkles could be ironed out. The remainder of this study, accordingly, will review the organizational changes which have taken place since the Navy Supply Plan was approved and discuss some of the factors which must be considered in evaluating the current organizational pattern.

Summary

The need for revamping the Navy's supply system after the end of World War II was widely recognized. The officers who were involved with the wartime supply problems were acutely aware of the need for improvement. In addition, several study groups cited the existing problems and made recommendations for improvement.

Work on devising an integrated Navy Supply System was begun shortly after the end of the war. Secretary of the Navy Forrestal approved the new Navy Supply Plan on February 14, 1947. The main thesis embodied in the plan was that supply and technical functions could be separately identified, and that there is a commonality in the supply functions which can be applied to all categories of material. Because of this commonality, supply functions should be the responsibility of a single bureau -- BUSANDA. The marriage of supply and technical functions was to take place in a series of commodity oriented field activities called supply-demand control points, which were to be jointly controlled by BUSANDA and the cognizant technical bureau.

Implementation of the approved plan was aggressively pursued. By the end of 1947 there were nine supply-demand control points in existence. In addition to the SDCP's a new concept

for storage activities was inaugurated. Naval Supply Centers were created at Norfolk and Oakland, similar to those previously established in the Pacific. These NSC's contained a series of component depots which specialized in a particular type of material, paralleling the material specialization of the SDCP's. The central headquarters of the NSC was responsible for overall coordination of the efforts of these component depots to insure unity of action for the center as a whole.

The new Navy Supply Plan received several favorable comments, including those of the Chief of Naval Operations, the Secretary of the Navy and the Hoover Commission. However, the plan was vague in several areas, a fact which may in part be responsible for some later difficulties. Notwithstanding its shortcomings, the Navy Supply Plan was a considerable improvement over the existing system and charted a course which was to be followed for years to come.

CHAPTER III

ORGANIZATIONAL CHANGES: 1947-1967

Since 1947 the Navy supply support organization has undergone almost a complete metamorphosis. The basic concept of the Navy Supply Plan has endured, but within the bounds of this concept a great deal of organizational transformation has occurred.

In tracing the development of the Navy supply support organization one must necessarily concentrate on the role of BUSANDA, the Navy's supply manager. In particular, this study concerns itself with the shaping and reshaping of BUSANDA's field organization on the premise that such changes are a manifestation of the policies of the headquarters organization and of the forces bearing upon it. This chapter enumerates the major changes to the BUSANDA field organization which have occurred since the implementation of the Navy Supply Plan in 1947 and describes the reasons why these changes have taken place.[46]

To provide a degree of orderliness in the presentation of this topic the changes to be discussed have been categorized under four major headings: further development of the system,

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[46]Unless otherwise noted, the information contained in this chapter was obtained from the official files of the Planning Division, Naval Supply Systems Command.

the trend toward centralization, economy measures and the effect of a BUSHIPS decision. These categories have been selected for convenience and should not be construed as being mutually exclusive. For example, economy measures have usually resulted in greater centralization; and the converse is also true, that centralization has usually resulted in economies. However, for our purposes we will single out one factor which was the predominant influence for a given action.

In recognition of the confusion which may result from attempting to negotiate this labyrinth of organizational changes, a complete record of establishments, disestablishments and changes is presented in Appendix A.

Further Development of the System

Subsequent to the initial flurry of action in 1947 several additional field activities were established as a direct result of the continuing implementation of the Navy Supply Plan. As could be expected, these new activities were of two types: additional supply demand control points and additional component depots under the Naval Supply Centers.

As noted in Chapter II there were nine SDCP's in existence at the end of 1947. This number remained constant for five years, but in 1952 three new SDCP's were established.

1. Medical and Dental Supply Office. It will be recalled that BUMED was originally excepted from the Navy Supply Plan "at that time." The establishment of M&DSO terminated this exception with BUMED and BUSANDA joining in a federation for the management of medical material.

2. Fuel Supply Office. This activity took over the functions formerly performed by the Fuel Division of BUSANDA. Its establishment was anticipated in the Navy Supply Plan but was held in abeyance. Creation of FSO, therfore, represents a decentralization of functions from headquarters to the field.

3. Provisions Supply Office. The circumstances surrounding the creation of this office are identical to those of FSO. Functions formerly performed by a division of BUSANDA were decentralized to this new field organization.

From 1952 to the present time there were only two additional SDCP's established before events began to reverse the trend, causing a drastic reduction in number. The Training Device Supply Office was established in 1956 at Port Washington, New York, to manage equipments used in the training of personnel. In 1957 the Forms and Publications Supply Office, Byron, Georgia, was established for the management of the material indicated by its title.

As for the NSC's, additional component depots were established as the need developed and the desirability of semi-autonomous status was recognized. At the time NSC Norfolk was established there were four component depots created: General Supply Depot, Aviation Supply Depot, Ordnance Supply Depot and Publications Supply Depot (plus continuation of Cheatham Annex in its previous status). Subsequently the following component depots were established:

Ships' Supply Depot	October 1948
Fuel Supply Depot	July 1951
Special Weapons Supply Depot	December 1951

Yards and Docks Supply Depot	March 1953
Provisions Supply Depot	September 1955

Similar expansion was experienced at NSC Oakland, which originally contained only three component depots: General, Aviation and Ships (plus Stockton Annex and the Fuel Annex). Additional depots were established as follows:

Ordnance Supply Depot	April 1948
Fuel Supply Depot	November 1950
Yards and Docks Supply Depot	October 1951
Medical and Dental Supply Depot	July 1952

The Medical and Dental Supply Depot was established at the same time that BUSANDA assumed supply management responsibilities for medical material and established an SDCP for this purpose. The M&DSD, NSC Oakland was the successor to the former Naval Medical Supply Depot, Oakland which had been under the management control of BUMED.[47] BUSANDA also assumed management responsibility for the Medical and Dental Supply Depot, Edgewater, New Jersey, at this same time.

There were some other actions which, while not fitting neatly into the category of further development of the system, are best discussed at this point.

1. The Naval Supply Depot, Great Lakes was established in July 1947. This NSD was an outgrowth of the Naval Training Center Supply Department and was created to furnish supply support to the many Naval activities in the midwest. While not specifically mentioned in the Naval Supply Plan, establishment of

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[47]U.S., Department of the Navy, Naval Supply Center, Oakland, Command History, December 1958, p. 45.

NSD Great Lakes certainly falls within BUSANDA's responsibility for performance of supply functions, as stated in recommendation No. 1 of the plan.

2. A Special Weapons Supply Annex was created at NSD San Diego in December 1951 as the West Coast counterpart of SWSD, NSC Norfolk. Since NSD San Diego was not organized in accordance with the existing supply center concept, this new activity was termed an annex rather than a component depot.

3. Navy Fuel Depots were established at Jacksonville in April 1951 and at Casco Bay, Maine in August 1953. Since there was no NSC or NSD at these locations, the fuel depots were established as independent activities directly under BUSANDA.

Establishment of the several activities noted above extended from 1947 through the mid-1950's, at which time the expansion in the BUSANDA field organization came to an end. With one exception (to be discussed in a later section) organizational actions after this time were characterized by centralization, consolidation and contraction.

Trend Toward Centralization

Perhaps the most significant trend in the field of supply management during recent years has been the movement toward centralization. This is primarily evidenced in the efforts to achieve unification and integration within the Department of Defense.

The pressures for unification in military supply had been building for a number of years, but very little was accomplished until 1956. The military services generally resisted such measures, resulting in much foot-dragging and an allegation

by a Congressional subcommittee that unification rested largely on paper. It is not the purpose of this study to review the background which preceded unification of military supply matters, but a brief mention of some of the pertinent events will suffice to show the amount of interest in the subject.[48]

As was noted in Chapter II the Strauss-Draper Report (1944) addressed itself to the subject of Army-Navy coordination of procurement and the Eberstadt Report (1945) was concerned with the unification of the Armed Services, including the fields of procurement and logistics. Since that time "there has been a long series of congressional legislation, proposed legislation, officially sponsored studies, GAO reports, DOD Directives, and studies -- all aimed [at least in part] at the integration, coordination, and consolidation of the military services' supply systems."[49] Some of the more pertinent are:

The National Security Act of 1947, Public Law 253.

The 1949 Amendments to the National Security Act.

The First Hoover Commission, 1949.

The O'Mahoney Amendment of 1952, Public Law 488.

The Rockefeller Report of 1953 -- DOD Reorganization Plan No. 6.

The Second Hoover Commission, 1955.

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[48]See Roland Rieve. "The Defense Supply Agency: Background and Prospects" (Thesis submitted to Industrial College of the Armed Forces, 1962) for a good description of the background leading to establishment of the Defense Supply Agency.

[49]U.S., Department of the Navy, Bureau of Supplies and Accounts, Proceedings of the Commanding Officers' Conference, 1961, p. OL-10.

The most pointed recommendation came out of the second Hoover Commission, which proposed the establishment of a separate civilian-managed agency, reporting to the Secretary of Defense, to administer common supply and service activities.[50] The prospect of a "fourth service of supply" was, of course, anathema to the military services. Thus the increasing pressure and continuing criticism prompted DOD to inaugurate the "single manager" concept, under which one service has supply management responsibility, for a given category of material, for the needs of all services.

In 1956 four commodity Single Manager Operating Agencies (SMOA's) were established -- for food, clothing, medical and petroleum products.[51] These SMOA's had DOD-wide inventory management responsibility, similar to the Navy-wide responsibility which had been vested in Navy SDCP's. The existence of these single-managers obviated the need for Navy SDCP's to perform item management functions for the designated categories of material. However, the Navy saw a need for an intermediary between the single-manager "wholesaler" and the "retailers" in the Navy distributive organization. So the creation of the single managers produced the dual requirement to disestablish the cognizant Navy SDCP's for the four commodity areas and establish in their stead a new type of activity, Navy Retail Offices.

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[50]U.S., Commission on Organization of the Executive Branch of the Government, Business Organization of the Department of Defense, June 1955, p. 45.

[51]BUSANDA, Proceedings of the 1961 Commanding Officers' Conference, p. OL-10.

The specific actions which resulted from creation of the first four single-managers are as follows:

1. The Provisions Supply Office was disestablished, with simultaneous establishment of the Navy Subsistence Office (a retail office).

2. Clothing Supply Office was disestablished, with simultaneous establishment of the Navy Clothing and Textile Office.

3. Medical and Dental Supply Office was disestablished. However, since Navy was designated as the single manager for medical material, two separate activities were created to replace M&DSO (and the Army and Air Force counterparts). The Military Medical Supply Agency became the single manager for medical material, and the Navy Medical Material Office assumed the responsibility of a Navy Retail Office.

4. Navy was also designated as the single manager for petroleum products. The Military Petroleum Supply Agency was established for this purpose; however, the Fuel Supply Office remained in existence to perform the Navy Retail Office functions for petroleum.

One storage activity fell victim to the unification effort begun under the single managers. Medical and Dental Supply Depot, NSC Oakland was disestablished in September 1957, with its functions transferred to the Army's Sharpe General Depot.

In 1959 and 1960 there were four more single managers established -- for general supplies, industrial supplies, construction supplies and automotive supplies. These four

affected only two Navy SDCP's; GSSO had been responsible for both general and industrial supplies while Y&DSO was responsible for, among other things, automotive and construction supplies. Since Y&DSO managed some material which was not moving to a single manager, it remained in existence in a dual capacity -- as an SDCP and as a retail office for automotive and construction supplies. In the case of GSSO, all material under its management was to move to the new single managers. However, since Navy was designated the single manager for industrial supplies, the expiring GSSO was reconstituted as the Military Industrial Supply Agency. The MISA also assumed retail office responsibilities for all material formerly managed by GSSO.

The single managers turned out to be the precursors of still greater unification and centralization. As stated in the DOD Supply Management Reference Book:

> The single manager agencies proved successful in reducing supply inventories and operating costs while maintaining effective support . . . ; however, as they grew they developed their own doctrines and procedures. A single manager was needed to control the single manager agencies.[52]

Under the impetus of the new Secretary of Defense, Robert S. McNamara, studies were conducted in 1961 which led to the establishment of the Defense Supply Agency. The DSA became the consolidated wholesaler for assigned common items of supply.[53] All of the commodities previously assigned to the single managers were assigned to DSA, which in addition, was given a sizable new responsibility for common electronics

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[52]U.S. Department of Defense Supply Management Reference Book, January 1965, p. 3.

[53]Ibid., p. 4.

material. Unlike the single managers. which were organizationally located within the framework of one of the military services, DSA moved upstairs a notch and was responsible directly to the Secretary of Defense.

The creation of DSA had its impact on field activities, as could be expected. All of the single manager operating agencies became Defense Supply Centers (e.g., Defense Industrial Supply Center) under the management control of DSA. Thus the Navy's three SMOA's (for industrial, petroleum and medical material) ceased to exist as Navy activities.

An additional difficulty was encountered as a result of the Navy's loss of the single managers. Two of them had been performing retail office functions (MMSA had assumed retail office responsibilities from the disestablished NMMO in July 1960) which had to be continued by the Navy and for which there was no ready-made home. Rather than create two new retail offices, the decision was made to incorporate retail management functions for industrial, general and medical material into a single new command -- the Fleet Material Support Office (FMSO). The idea behind the creation of FMSO was to provide an organization with responsibility for several coordinative functions, notably in the area of weapon systems management. But two of the basic factors were the need for performance of retail management functions and for liaison with DSA.[54]

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[54]U.S., Department of the Navy, Bureau of Supplies and Accounts, Proceedings of the Navy Supply Conference, 1962, pp. E-3 through E-5.

The growth and development of DSA continued to have its effect upon the functional responsibilities of the Navy supply support organization, but the above narrative completes the saga of the effect of unification of military supply matters on the nature and existence of Navy field activities. There is one other significant event, however, which must be discussed under the heading of centralization. In this instance the centralization was internal to the Navy, but the phenomenon is just as real. The event to which we refer is the implementation of a new concept for the organization of Naval Supply Centers whereby the component depots are merged into a single large supply activity.

As was discussed earlier, the component depots of an NSC were semi-independent commands under the overall command and coordination of the parent supply center. Over the years certain problems developed and modifications were made to the basic structure. In a BUSANDA study of NSC Norfolk the following statement was made:

> . . . the autonomous operation of the component depots presented problems in scheduling and controlling workload, assigning personnel to meet fluctuations in depot workloads, providing simple and coordinated replies to customer inquiries and in implementing standard methods and procedures. Additionally, the progressively more restricted and limiting budgets pointed to practical difficulties in maintaining relatively independent depots with duplicate administrative and service functions.
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> Gradually, over the period from 1947 to 1957, attempts to solve the inherent problems of the organization at NSC Norfolk led to the centralization of the following common functions: disposal, receiving, shipping, packing, preservation, delivery, physical inventory, preparation of invoices and updating of stock records. In effect this left the functions of control and storage of material as the residual responsibilities of the component supply depots.[55]

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[55]U.S., Bureau of Supplies and Accounts, Appraisal of Reorganization of Naval Supply Center, Norfolk, Va., September 1960, pp. 1-2.

Another important factor pointing toward consolidation was the emergence of automatic data processing, which brought new concepts for paperwork handling. The first ADP equipment used in the Navy supply support organization was introduced in the middle 1950's, and it was thought that eventually computers would assume the bulk of the routine control functions at supply activities.[56]

As a result of the problems and considerations noted above, the decision was made to abolish the several component depots and consolidate their functions into the Center organization as of April 1, 1958. However, Cheatham Annex and Special Weapons Supply Annex maintained their identity as components of the NSC because of their unique characteristics.

Physical consolidation of the component depots was a huge undertaking, and not without its problems. For this reason the reorganization of NSC Oakland was held in abeyance until lessons learned at Norfolk could be used to advantage. In November 1960 all component depots at NSC Oakland were disestablished with the exception of the Fuel Supply Depot, which retained its separate identity until June 1962.

While the actions discussed in this section have been the major ones brought on by the trend toward centralization, as they affected the Navy supply support organization, they are by no means the only ones. Many other consolidations have taken place at the local level in the field organization, particularly where several organizations in the same geographical area performed the same or similar functions. The ever-present budget

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[56] Ibid., p. 2.

pressure is unrelenting in its demand for economy, and this has led to the consolidation of a broad range of common service functions at Naval Base complexes. In the field of supply the "area support" concept has been developed to accomplish this end. Further discussion of this matter is reserved for Chapter IV.

Before leaving the subject of centralization a word of caution is considered appropriate. Back in 1952 Vice Admiral C. W. Fox, then Chief of Naval Material, noted that "the most apparent trend in the field of supply management is toward centralization."[57] At that time efforts toward centralization were in their infancy, with actions having been taken in the areas of cataloging, procurement and cross-servicing and the initial entrance of DOD into supply management operations. Admiral Fox noted the possibility of a "fourth service of supply" and sounded a vigorous warning against permitting this to occur. On the subject of centralization he stated that there were two false conclusions then prevalent, viz.:

> That there is an inherent virtue in centralization and complete standardization . . .
> That bigness of itself begets economy . . .[58]

In view of the turn of events since 1952, Admiral Fox was certainly correct in his observation about the trend toward centralization. Perhaps some of his deepest concerns are now facts of life. Do his warnings on the false conclusions about centralization foreshadow a reversal of the trend or will we see still more centralization? Only time will tell.

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[57]U.S., Department of the Navy, Bureau of Supplies and Accounts, Proceedings of the Supply Management Conference October 6-10, 1952, p. 18.

[58]Ibid., p. 17.

Economy Measures

Use of the term "economy" as a prime factor in the operation of the supply support organization has perhaps been in vogue ever since there was such an organization. Certainly it permeates the documents reviewed by this writer in conducting the research for this paper. Often-times the word seems to have been little more than a cliche, but within the past decade a number of actions have leant realism to this over-worked word.

In terms of the supply field organization the effecting of economies is, of course, a one way street -- that of reductions and closures. The realization of such economies might arise from voluntary actions, such as when an activity is closed because it is no longer required, or from a relatively coercive action such as a budgetary squeeze. The supply activities which were disestablished in the first ten years after the Navy Supply System was born seem to fit in the former category while those within the past ten years tend toward the latter.

The initial post-war effort to review the requirement for supply support facilities resulted from the appointment of a board by the Chief of BUSANDA on August 28, 1946. The board was instructed to "survey the shore activities operating directly or indirectly under the cognizance of BUSANDA and to recommend increases, reduction, reallocation or abandonment of facilities to adequately provide balanced supply support to the post-war Navy."[59] When it first convened, the Board found the following

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[59]U.S., Department of the Navy, Bureau of Supplies and Accounts, Survey of Activities Under BUSANDA Cognizance, January 15, 1947, p. 1 of forwarding letter.

facts to be pertinent:

> a. The wartime supply establishment was substantially the same size as that existing shortly after V-J Day. Many activities existed for which the necessity and mission were not clearly defined on a peacetime or mobilization basis.
> b. Strategic and economic considerations could not long support facilities which were developed during the war.[60]

In its report the Board made a number of recommendations for reductions in storage facilities. While these reductions may have seemed significant at the time, they now appear almost trivial as compared with many of the rather drastic actions in recent years. Briefly, the Board's recommendations for reduction in storage facilities can be summarized as follows:

1. Several Naval Storehouses were recommended for disestablishment. These were not major activities but had been established for expediency as adjuncts to larger activities in order to alleviate crowded storage conditions.

2. A reduction in the scope of activities was proposed for NSD Newport, NSD San Pedro, Cheatham Annex and NASD Norfolk.

3. NSD New Orleans was recommended for disestablishment as of March 1, 1947. This was the only primary storage facility to be recommended for closure, and it was a very small one at that.

Other than NSD New Orleans there were only four additional closure actions effected by the mid-1950's, as follows:

1. Naval Clothing Depot, Brooklyn was closed in January 1951

2. Torrance Annex of NSD San Pedro was disestablished as a separate activity of the Navy in August 1951. However, the

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[60] Ibid., p. 1.

facilities were subsequently used again by NSD San Pedro, thence by NSY Long Beach, and presently by NSC Long Beach.

3. Medical and Dental Supply Depot, Edgewater, New Jersey was closed in August 1954, with its functions being assumed by NSD Bayonne.

4. Naval Supply Depot, San Pedro was disestablished in November 1955, leaving the Supply Department, NSY Long Beach as the major supply activity in the Los Angeles/Long Beach area. At this same time the Naval Fuel Depot, San Pedro was established as a separate activity of the Navy rather than becoming a department of the shipyard.

The increasing pressure for economizing has been most evident within the past ten years. Whereas BUSANDA's constellation of supply support field activities was reduced by only five during the years 1947 to 1958, there were no less than fourteen activities disestablished since 1958 (exclusive of those noted in the section on centralization). A listing of these activities is presented in Table 2, along with the dates of disestablishment and the anticipated annual savings. No attempt will be made to trace the disposition of the myriad functions involved. Suffice it to say that they were absorbed by remaining supply activities, so that a measure of consolidation and centralization was at least a by-product of these closure actions if not the primary motive.

In reviewing the history of these closure actions it is quite apparent that budgetary pressure has been pervasive. An early example is found in the proceedings of the 1952 Navy Supply Conference wherein the necessity for effecting savings was

TABLE 2

BUSANDA SUPPLY SUPPORT FIELD ACTIVITIES
DISESTABLISHED IN THE YEARS 1958-1967(a)

Activity	Date of Disestablishment	Anticipated(b) Annual Savings
NSD Spokane	June 1958	(c)
Training Device Supply Office	April 1959	(c)
NSD Scotia	December 1959	$1,600,000
Submarine and Reactor Parts Supply Office	April 1961	1,170,000
NSD Clearfield	June 1962	4,897,000
NFD Casco Bay	December 1962	196,000
Yards and Docks Supply Office	June 1963	585,000
Forms & Publications Supply Office	May 1964	113,500
Stockton Annex	June 1965	1,330,000
Ordnance Supply Office	June 1965	1,074,000
NSD Great Lakes	June 1966	750,000
Navy Clothing & Textile Office	July 1966	241,800
NSC Bayonne	August 1967	3,480,700
NSD Seattle	October 1967	1,021,000

(a)Exclusive of disestablishments attributable to unification of military supply functions under DSA and to reorganization of Naval Supply Centers.

(b)Annual savings are exclusive of one-time closure costs.

(c)Figures no longer available.

stressed because of the many pointed questions being directed at the Navy by Congressional Committees, the Office of the Secretary of Defense and the Bureau of the Budget.[61] In endeavoring to find ways to achieve the necessary economies, a listing of "major deficiencies" was presented to the conferees. Included in this listing were several which help explain, at least in part, why some future closure actions were undertaken. The following are representative of the deficiencies noted:

> (1) The cost of operating our inventory control functions is excessive, being completely out of proportion to the sales made.
> (2) The number of different items stocked in the system is too high . . .
> (3) The system is full of excess, slow-moving and dead items . . . , with the result that valuable storage space is occupied and excessive funds are required . . .
> . . . . . .
> (7) Several of our distributive systems call for the duplication of stocks of the same items at several supply activities in the same location . . .[62]

In the pursuit of correcting the deficiencies noted and continuing the refinement of the integrated Navy Supply System, many improvements were obviously made. Whether the quest for improvement or the compulsion of the budget was the principal cause of base closures is a moot point; but it goes without saying that a significant number of activities were closed in the name of economy.

This movement has been spurred considerably under the regime of Secretary McNamara, whose continual drive for economy has resulted in an annual round of base closures in recent years.

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[61] BUSANDA, 1952 Supply Management Conference, p. 24.

[62] Ibid.

In order to keep pace with the accelerated DOD pressure, and perhaps gain a measure of forehandedness, the Navy has had to counter with its own array of studies and reviews. In the early 1960's many Base Utilization Studies were conducted, followed more recently by a series of studies of the entire complex of Navy field activities, under the aegis of the Navy Installations Survey Group. These have been in-depth studies, requiring a soul-searching determination of which activities were truly "hard core" Navy requirements. Needless to say there have been closure actions which have resulted from these studies. Just how much further such reductions can go is anybody's guess, but it is evident that the pressures for economy will continue to be a fact of life.

A Momentous BUSHIPS Decision

In Chapter II the subject of BUSANDA's lack of responsibility for performance of supply functions in some important segments of the Navy Supply System was briefly discussed. This situation existed primarily at Naval Shipyards and large Naval Air Stations, who have had major supply system responsibilities and substantial amounts of system inventories in their custody. Of course supply support is not the primary mission of shipyards and air stations; the supply departments at these activities have therefore had to assume the dual responsibilities of organic station support and supply system support.

The existence of dual responsibilities for a shipyard supply department is by no means a recent innovation. Indeed the Navy Yards were a principal source of logistic support in

the Navy's earlier days, including the pre-World War II period when only two Naval Supply Depots were in existence. As noted in Chapter II, implementation of the Navy Supply Plan in 1947 did nothing to alter the situation. This is borne out by a study conducted at the Philadelphia Naval Shipyard in 1948, wherein the mission of the supply department was discussed. While it was stated that the shipyard had no detailed supply mission, it had responsibilities for supporting the ships berthed in the yard and other Naval activities in the Fourth Naval District, in addition to its general supply mission of support to the Naval Shipyard.[63] The study went on to state:

> The Supply Department, thus, is performing a dual role in the sense that it is performing a Supply Department function and a Supply Depot function. Percentage wise these dual functions are split so that of all line item requests for material received, 40 per cent constitutes Shipyard requests and 60 per cent constitutes requests from all other activities.[64]

In recognition of the existence of this dual role, BUSHIPS and BUSANDA have for many years cooperated in a system of "split-funding" for shipyard supply departments. Thus BUSANDA was able to discharge its responsibility for supply system operations by virtue of its funding for that portion of the shipyard supply department operation which was not organic to the yard. And by virtue of its control over a portion of the purse, BUSANDA gained a stronger -- albeit limited -- voice in the operation of shipyard supply departments as a segment of the Navy Supply System.

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[63] U.S., Department of the Navy, Philadelphia Naval Shipyard, Material Control Study, July 9, 1948, p. 6.

[64] Ibid.

The system of split-funding worked tolerably well, but it was not devoid of problems. For one thing shifts in the proportion of supply system versus industrial workload inevitably worked to the advantage of one bureau and the detriment of the other. Since shipyards are industrial-funded and must pass on their overhead to their "customers," uncontrollable fluctuations in their supply department costs could play havoc with overhead rates. From the BUSANDA viewpoint an undesirable rigidity existed when increasing system workload dictated the requirement for more BUSANDA dollars; even if these dollars were available, their use could be frustrated if hiring of additional people became impossible for lack of personnel ceiling, which was controlled by BUSHIPS. In addition, the time and attention of the shipyard Supply Officer were divided between two basic responsibilities, and it is understandable that the needs of the shipyard (whose commander is his boss) would predominate, sometimes to the detriment of the supply system responsibilities. Lastly, shipyard commanders generally did not relish being held responsible for supply system functions which were alien to the basic mission of the shipyard.

For all of these reasons, BUSHIPS and BUSANDA came to an agreement that it was in the best interests of all concerned that the shipyards be divested of supply system responsibilities. There have been several pronouncements on the subject, one of which was a BUSHIPS/BUSANDA joint letter on June 1, 1965 which stated that the two bureaus were "engaged in a joint program to transfer responsibility for management of non-industrial supply

functions from Naval Shipyards to Naval Supply Centers and Naval Supply Depots."[65]

The first action to be taken in implementation of this policy was the establishment of NSC Charleston on January 2, 1964. Supply system responsibilities had grown immensely at NSY Charleston because of the assignment of responsibility for support of Polaris submarines; consequently the need for change was most apparent at Charleston. The supply center was created from portions of the former shipyard supply department, leaving the residual supply department with personnel, facilities and responsibility for support of only the shipyard.

Similar action was taken at Long Beach with the creation of a Naval Supply Center on April 1, 1964. A third dichotomy was performed at NSY Puget Sound on October 2, 1967. This transaction was complicated by the existence of NSD Seattle across the sound, but a suitable plan was developed for consolidation of the functions and facilities of the two activities. Upon creation of NSC Puget Sound the NSD Seattle was disestablished.

Full implementation of this policy was expected to take a number of years in deference to the detailed planning and complexities involved. There are still six shipyards which hold some supply system inventories; however, three of these (Norfolk, San Francisco Bay and Pearl Harbor) have relatively minor quantities because of the proximity of existing Naval Supply

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[65]Joint letter from the Bureau of Ships and the Bureau of Supplies and Accounts to the Chief of Naval Material, serial 731-202 and E2/1096, dated June 1, 1965.

Centers and the fact that local arrangements have been made to reduce much of the duplication. Completion of this program awaits the introduction of additional, advanced data processing capability which will permit item control at multiple locations. On balance, a great deal has been accomplished toward implementation of the joint BUSHIPS/BUSANDA policy and it is reasonable to assume that complete implementation will be a reality in the not-too-distant future.

Observations

In bringing this chapter to a close let us reflect for a moment on the significance of some of the changes which have been discussed.

With two notable exceptions the development of the Navy supply support organization since 1947 has been limited to actions internal to BUSANDA and its field organization. As was noted in Chapter II, BUSANDA's authority has not been commensurate with its responsibility for administration of the integrated Navy Supply System. True integration has been a function of cooperation among Navy bureaus, and the vested interest of technical bureaus has acted as a damper. Notwithstanding, the actions of BUMED and BUSHIPS must be counted as exceptions.

In the case of medical and dental material BUSANDA assumed responsibility for both inventory control and distribution activities in 1952. BUMED was thereupon completely out of the wholesale supply management business except for its inalienable responsibility for technical control over this material.

The action of BUSHIPS is even more noteworthy, in the opinion of this writer. BUSHIPS had been, from the outset, a

participant with BUSANDA in the inventory management functions through the SDCP's. However, the shipyards under BUSHIPS had control over substantial quantities of supply system inventories. Unlike the medical activities, which were concerned with only a single category of material, the shipyards possessed a complete range of all categories of Navy material and had broad responsibilities as major elements of the supply system. These responsibilities were of such magnitude as to warrant the creation of supply centers for performance of supply system functions. The action of BUSHIPS, therefore, stands out as an important milestone in the integration of the Navy Supply System. There is no doubt that the BUSHIPS action was to some extent self-serving, but parochialism was largely set aside in the transfer of control over sizable inventories to BUSANDA.

There remains one major segment of the Navy Supply System over which NAVSUP[66] still has only tenuous authority -- the aviation segment. Major naval air stations have possession of the majority of aviation material and their supply support responsibility generally extends far beyond self-support. However, there has been no agreement comparable to that made in the case of shipyards whereby supply system responsibilities would be separated from organic support responsibilities. Further discussion of this matter is reserved for Chapter IV.

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[66]Effective May 1, 1966 the name of BUSANDA was changed to Naval Supply Systems Command (NAVSUP). The mission of the command remained the same, so the acronyms BUSANDA and NAVSUP may be considered synonymous if confusion results from attempting to shift back and forth in the text because of the point in time being discussed.

Another observation on the material contained in this chapter is that the emergence of DSA has significantly altered the role of NAVSUP in the area of inventory management. DSA has assumed responsibility for item management of nearly all common material. This has left only peculiar, technical items for management by the three remaining Navy inventory control points (ICP's -- the current term for the former SDCP's). These ICP's (ASO, ESO and SPCC) now devote most of their effort to weapons system support rather than to stock control. That is, the ICP's determine requirements for repair parts support of Navy equipments, prepare allowance lists and load lists, maintain technical data files and insure that the necessary material is available either through Navy peculiar inventories or from the DSA system.

The cumulative effect of the above changes on NAVSUP is twofold: a reduction in scope but increase in complexity and specialization in the inventory management area, and an expansion of responsibility in the supply distribution system. With DSA playing a dominant role in inventory management, the thrust of NAVSUP's Navy Supply System responsibility must be on weapons system support and on exercising overall supply system responsibilities through a network of major storage and distribution activities (supply centers).

A final observation is that the Navy's highly regarded inland supply depots have all but disappeared. During and shortly after World War II there was much ado about the desirability of well designed, efficient storage facilities strategically located to back up congested coastal facilities, and about the necessity for dispersal of material.

A prime reason why inland depots no longer exist is, of course, that they have fallen victim to the economy axe. This was a topic discussed at the 1954 BUSANDA Field Conference in the course of reviewing a new policy of stocking in depth at the point of use, a move designed to minimize echeloning of stocks and reduce the cost of a vast movement of material between stocking points. However, the feeling at that time was that the new policy would actually result in additional dispersal by spreading reserves at many stock points rather than concentrating them at inland depots.[67] The facts of life were well stated in a presentation at the 1961 Commanding Officers' Conference:

> The distribution, or physical side of the system, has been rather sharply reduced since 1947. As these reductions have taken place, we have been careful to retain those activities in direct support of the fleet. Better to release a valuable inland storage facility -- with its general mobilization advantages, than to chance a reduction in our immediate direct support capability. This has been a governing principle as we have faced up to the pressures of a level budget and increasing costs.[68]

Two factors can be cited which serve to minimize the potential seriousness of losing the inland depots for purposes of dispersal. First, the existence of DSA and its complex of distribution facilities has reduced the requirement for Navy reserve stocks of common supplies. The "reserves" of this material can be considered to be in the DSA wholesale system, positioned at the various DSA depots throughout the country. Secondly, the increasing emphasis on self-sufficiency of fleet

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[67] U.S., Department of the Navy, Bureau of Supplies and Accounts, Proceedings of BUSANDA Field Conference, November 1-5, 1954, pp. I78-I82.

[68] BUSANDA, 1961 Commanding Officers' Conference, p. OL-3.

units is a measure of dispersal in itself since the inclusion of essential material in allowance lists reduces the reliance on shore-based stocks.

Summary

This chapter has traced the many changes in the Navy supply support organization since the inception of the Navy Supply System in 1947. In describing these changes an attempt was made to analyze the reasons why the changes took place; certain observations were offered as to the effect of these changes.

The discussion of organizational changes was organized in accordance with the four primary causes: further development of the supply system, the trend toward centralization, economy measures and the effect of a BUSHIPS decision. The net effect of all of the changes was a tremendous reduction in the number of BUSANDA (NAVSUP) field activities, a recasting of NAVSUP's inventory management role as a result of DSA's emergence, and an extension of NAVSUP's authority over the supply distribution network.

A recap of these organizational changes is provided in Appendix A for convenience of reference.

CHAPTER IV

CONSIDERATIONS BEARING ON THE CURRENT ORGANIZATION

So far we have traced the development of the Navy supply support organization up to the present time. The task of reviewing and evaluating the current organization remains to be accomplished. However, before proceeding with this task, let us review some of the factors which have a bearing on the shape the organization takes and the manner in which it functions.

While this paper has concentrated on matters of organization, the implication is that these matters have a bearing on the effectiveness and efficiency of supply support of the Navy. In order to avoid the impression that organization is being held out as an end in itself, one may turn back to 1945 and the Eberstadt Report, wherein this sobering reminder is provided:

> In preparing this report on military organization, we recognize the inherent limitations of focusing our attention primarily on questions of structure and organization. Great leaders have in the past won victories despite outstanding weaknesses in the organization over which they exercised command. Experience proves that good organization and good leadership can be rendered inadequate if confronted with overwhelming forces or if required to operate in an unfavorable environment. Even where highly effective organizations are planned and set up in advance, personality and environment remain as variable and unpredictable factors which can undo the most carefully conceived administrative plans.
>
> Hence, when we deal with questions of military organization, we realize that our analysis must comprehend other factors as well....And so, when we come to grips with organizational problems, we do so with a full consciousness of the limitations inherent in such an approach.[69]

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[69]Eberstadt Report, p. 31

This word of caution applies equally well here as in the Eberstadt Report. Nevertheless, the focus on organization is deemed to be useful to provide insight into one facet of the Navy supply support story.

One further word of caution concerns the transitory nature of both organizations and the regulations and directives which affect their status. This is to prevent undue emphasis on the printed word, which is neither unalterable nor inviolable. For example, Navy Regulations may be considered one of the more sacrosanct of all Navy publications, but changes in people, problems, resources, circumstances and ideas all contribute to the requirement for updating or, in fact, finding other ways for the meeting of requirements. The point is that one should not base an argument solely upon a directive which has been issued at one time or another, since those in charge of issuing the directive can, and usually do, find reasons for bringing about changes. At best, quotations from past directives and regulations reflect the ideas existing at the time, but these ideas are always subject to challenge.

With these caveats in mind, let us proceed with the review of some of the factors influencing the organization for Navy supply support.

The Nature of the Navy Supply System

One of the most burning issues in the field of Naval logistics in recent years has been the lack of a definition of just what the Navy Supply System is. In the report of the BUSANDA Component Study Group (an input to the Dillon Report)

the statement was made that a policy document defining the scope of the Navy Supply System has never been issued. This was cited as the reason why the Navy Supply System remains somewhat vague and its lines of authority clouded.[70]

Lacking a policy document which defines the Navy Supply System, a number of study groups, in the process of exploring supply or logistics problems, have found themselves at a loss when trying to come to grips with this so-called "system." They were forced to either skirt the issue or undertake their own definition. The following citations are illustrative of the problem.

In 1962 a private research organization, Dunlap and Associates, produced a paper entitled "The Navy Supply System Ashore." They did not offer a definition per se but noted that the supply system is a vast complex of over 300 activities, ranging in size from huge supply centers to the small supply departments of secondary air stations. The report goes on to state:

> The system goes far beyond the confines of the BUSANDA managed activities; in fact, a majority of the supply facilities are not managed or controlled by BUSANDA (despite the widely accepted Navy myth that BUSANDA runs the supply system). To be sure, these account for only about 15% of the system in terms of operating budget; nevertheless, they manage and stock about half the inventory, over which BUSANDA can exercise little or no control.
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> It is more important to emphasize here that the "supply system" is in fact a rather amorphous grouping of many

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[70] U.S., Department of the Navy, Bureau of Supplies and Accounts, Final Report of the Bureau of Supplies and Accounts Component Study Group, Part of Review of Management of the Department of the Navy, August 31, 1962, enclosure 17, p. 21.

> independently managed systems, often with very little real mechanism for internal control or coordination between the system parts.[71]

The Material Management study of the Dillon Report also took cognizance of the problem of unclear authority and responsibility within the Navy Supply System. Included in the discussion of this problem was mention of the fact that Navy Regulations had assigned certain inventory management responsibilities to BUSHIPS AND BUWEPS. This has reference to the so-called "Bureau controlled material," for which the technical bureaus act in their own behalf as inventory control points instead of delegating this responsibility to BUSANDA managed ICP's. In order to clarify these responsibilities, the following recommendation was made:

> 17. That the Navy Supply system be defined to exclude the inventory management functions performed within material bureaus and to include all field supply processes, procedures, activities and facilities participating in the procurement, inventory management, storage, and distribution of Navy material to the operating forces.[72]

No action was forthcoming on the recommendation of the Material Management Study. However, the heightening interest in efforts to improve Navy logistic support, including an interest expressed by the Secretary of Defense, led to the appointment of a Material Support Steering Committee in December, 1964. Among other things this committee was charged with developing "a clear,

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[71]Dunlap and Associates, Inc., The Navy Supply System Ashore, Working Paper No. 2 under Contract Nonr-3642(00), February 1, 1962, p. 1.

[72]U.S., Department of the Navy, Material Management Study, One of Seven Department-Wide Contributory Studies conducted as Part of the Review of Management of the Department of the Navy, Vol. II, November 2, 1962, Study 4, Vol. I, pp. 33-35.

concise description of the Navy Supply Support System, expressed in layman's terms."[73]

To carry out the detailed work required, the committee created a Navy Logistic Support Task Force. One of the products of the Task Force's efforts was a publication entitled "Logistic Support of the Navy" which described the logistic support responsibilities of the various organizational elements involved in the process; it went into some detail to describe the functioning of the logistic support system. However, when it came to describing the Navy Supply System, the authors resorted to creation of their own definition "for the purpose of this report," as follows:

> . . . the Navy Supply System encompasses those people, skills, facilities, funds, inventories, policies, plans, programs, and procedures throughout the Department of the Navy that together produce technical supply aids, determine quantitative requirements, and provide centralized inventory management and distribution of Navy material on an item basis so that all material can be applied to requirements when they exist. The system extends from the Departmental level (developing Bureau/BUSANDA) to Bureau or field inventory control points (ICP's), the distribution system stock points of the Naval Material Support Establishment and to the lowest echelon at which item information and distribution authority is held by an inventory manager.[74]

Upon completion of the descriptive document "Logistic Support of the Navy," the Task Force used it along with existing laws, regulations, concepts and practices as the basis for an analysis of logistic support in the Navy.[75] The findings of the

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[73]Memorandum from the Vice Chief of Naval Operations to the Deputy Chief of Naval Operations (Logistics), serial 3882P41, dated December 16, 1964.

[74]U.S., Department of the Navy, Bureau of Naval Personnel, Logistic Support of the Navy (NAVPERS 10495), 1965, p. 48.

[75]U.S., Department of the Navy, Navy Logistic Support Task Force, Navy Logistic Support Improvement Plan, June 1965, p. iv.

Task Force were described and grouped into major projects with remedial objectives, which were compiled into a document entitled "Navy Logistic Support Improvement Plan" (NAVLOGSIP). One of these findings, predictably, was that "there is a need to define the Navy Supply System and to designate the organizational elements responsible for the functions therein."[76] The Task Force stated that it was unable to find an authoritative definition of the Navy Supply System, and considered this a major problem within the Navy. So NAVLOGSIP objective number four was established for the purpose of defining the Navy Supply System and indicating the organizational element responsible for each function.[77]

The group which was assigned the task of accomplishing NAVLOGSIP objective number four was the one referred to in the introduction to this paper. It is they who turned their efforts to the writing of a book describing how the Navy is supplied and purposely avoided becoming enmeshed in the organizational web. It is they who began their book with the statement "there is no Navy Supply System in the sense of an organization with a structure of command and inherent responsibility." But after proceeding to explain the meaning of this statement, the "objective four study group" went on to offer the following definition:

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[76] Ibid., p. II-1

[77] Ibid., p. II-4.

> Thus, in sum, the Navy Supply System as it exists -- in practice but not in organization -- is the network of people, resources, material, processes and organizations, regularly interacting to accomplish the vital function of keeping the Navy supplied.[78]

The foregoing is ample evidence of the dilemma surrounding the definition of the Navy Supply System. All of the definitions offered recognize that it is not possible to produce a simple, cut and dried definition and that the system is in reality a complex which permeates throughout the entire Navy, regardless of organizational lines. Despite all of the attempts at a definition, there is still no official, authoritative definition in existence, so future study groups will doubtless continue to wrestle with the problem.

Perhaps the question should be raised as to whether the Navy Supply System is really a system at all. Stanley Young, in his book Management: A Systems Analysis, quotes Richard Johnson (and others) in defining a system as "an organized and complex whole; an assemblage or combination of things or parts forming a complex or unitary whole."[79] And later Young offers a definition for a normative system, as follows:

> A system is a collection of entities or things (animate or inanimate) which receives certain inputs and is constrained to act concertedly upon them to produce certain

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[78]U.S., Department of the Navy, Bureau of Naval Personnel, Supplying the Navy (NAVPERS 10487), 1967, p. 1.

[79]Stanley Young, Management: A Systems Analysis (Glenview, Illinois: Scott, Foresman and Company, 1966), p. 5, quoting Richard Johnson, Fremont Kast and James Rosenzweig, The Theory and Management of Systems (New York: McGraw-Hill Book Company, 1963), p. 4.

outputs, with the objective of maximizing some function of inputs and outputs.[80]

The first of these definitions is divided into two components. The Navy Supply System defies the primary component, which holds that a system is an organized whole. The secondary part of the definition requires only that a system be an assemblage or combination of parts forming a complex or unitary whole. Under this more liberal definition the Navy Supply System does seem to qualify, but there might be some question as to whether the unitary whole ceases to exist if the combination of parts becomes too loosely joined.

The second definition, that of a normative system is not as abstract as the first and is therefore easier to use for purposes of comparison. In elaborating upon this definition, Young notes that the basic parts of a system are the input, the process or operations, and the output.[81] It follows that, for a system to be effective, the system manager must have the necessary control over the process to insure that the inputs are converted into the desired outputs. On this point Young cites a statement of Johnson et al that the "objective of control is to maintain output, which requires the ability to rearrange resources as conditions change."[82] In measuring the Navy Supply System against this definition there is apparently a good fit

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[80]Young, pp. 15-16, quoting Richard B. Kershner, "A Survey of Systems Engineering Tools and Techniques," Operations Research and Systems Engineering, Charles D. Flagle, William H. Huggins, and Robert H. Roy (eds.) (Baltimore: The Johns Hopkins Press, 1960), p. 41.

[81]Young, p. 16.

[82]Ibid., p. 27.

since there is a collection of entities receiving inputs which must be operated upon in order to produce the desired outputs. However, as has already been described, the Navy Supply System falls short when you consider the manager's ability to control the operating parts of the system, including the ability to rearrange resources. Limitations on the ability of NAVSUP (BUSANDA) to control the system will be discussed further in the next section.

Curiously a presentation at the 1963 Navy Supply Conference, in discussing what the Navy Supply System is, also resorted to the fundamental step of defining a system. In so doing it called upon Webster's Dictionary for a definition very similar to the first one quoted from Young's book. Noting the increasing fragmentation brought on by uniform DOD procedures, the presenter commented that the Navy Supply System is not whole in relation to its support responsibilities and that there was no supply system as an entity by itself unless it was defined in much narrower terms than had been the custom.[83] However, no such narrower definition was offered.

So far the difficulty in defining the Navy Supply System has been discussed mainly in terms of the multifarious organizations which claim a role as participants in the system. However, in addition to organizational questions, there is also the problem of defining what material is included in the system. The recommendation in the Navy Supply Plan (cited in Chapter II) was

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[83]U.S., Department of the Navy, Bureau of Supplies and Accounts, Proceedings of the 1963 Navy Supply Conference, 1963, p. E-9.

that categories of material of a replenishable nature would be included in the Navy Supply System as jointly decided upon by the cognizant technical bureau and the Chief of BUSANDA. This, of course, allows for retention of certain material by the technical bureau.

In his testimony before the Committee on Organization of the Department of the Navy in 1958, Rear Admiral Boundy (then Chief of BUSANDA) took note of the situation. Admiral Boundy expressed satisfaction with the organization of the Navy Supply System, but he went on to state that the system at that time contained about 1,200,000 items worth $5.0 billion while the technical bureaus controlled 36,000 items worth $7.2 billion. He stated that this material under the technical bureaus was not in the Navy Supply System except for storage, and recommended that the technical bureaus get out of the business of inventory management of so-called "secondary items."[84]

This same view was given by the BUSANDA Component Study Group in its contribution to the Dillon Report in 1962. The Group noted that, when technical bureaus did divest themselves of inventory management of certain material, they spoke of transferring these items to the Navy Supply System.[85]

The DOD Supply Management Reference Book states that "it is basic Navy policy that inventory management of Navy material will be assigned to the ICP's under the command of BUSANDA."[86]

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[84] James W. Boundy, "Testimony Before the Committee on Organization of the Department of the Navy," 1958.

[85] BUSANDA, Report of Component Study Group, enclosure 17, p. 20.

[86] U.S., Department of Defense, Supply Management Reference Book, January 1965, p. 19.

It goes on to say that other bureaus and offices will manage only those items for which acquisition and continued control are essential to the discharge of their peculiar mission. Such items include those which are in a research and development stage, those of such technical complexity that bureau engineering decisions must be made prior to issue, and those which satisfy a one-time requirement.

With all of the confusion in attempting to define the Navy Supply System, it would be presumptuous to prescribe an organizational structure here nor may this be what is really needed. It is possible, however, to delimit the problem in order to serve a given purpose and this will be attempted in Chapter V, with full awareness of the hazards involved.

Limitations of NAVSUP Control

When considering the organization for Navy supply support it is impossible to ignore the central role of the Naval Supply Systems Command (formerly BUSANDA). The very name of the command links it inextricably with the Navy Supply System, but unfortunately this name creates an illusion which belies NAVSUP's tenuous authority over certain segments of the "system."

The Navy Supply Plan contained language which would have BUSANDA assigned the responsibility for the performance of supply functions in the Navy Supply System. The BUSANDA Organization Manual of 1950 reflected this responsibility in the delineation of one of the bureau's functions as "supervises and directs the operation of the supply phases of the Navy Supply System."[87]

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[87]U.S., Department of the Navy, Bureau of Supplies and Accounts, Bureau of Supplies and Accounts Organization Manual (NAVSANDA Pub. 70), April 1, 1950, p. 3.

Language of this sort continued to appear in various documents and publications up until recent years, stating, for example, that BUSANDA is the bureau concerned with material and supply management[88] or that the Chief of BUSANDA is the Navy Supply Manager and is responsible for the development and direction of the Navy Supply System.[89]

The current edition of NAVSUP's charter, however, contains no such reference to directing or operating the Navy Supply System. As contained in the organizational manual of the Naval Material Command, which is now in the chain of command as NAVSUP's immediate superior, the following are included among NAVSUP's responsibilities:

Administer the Navy Supply System.

Provide supply management policies and methods for Navy material . . .

Perform supply management functions for items assigned to the NAVSUP ICP's.

As the Navy's Supply Manager, develop and supervise the Navy Supply System.[90]

Clearly the stress in these statements is upon administering, supervising and coordinating rather than upon directing or operating. It would be easy to get lost in a semantic jungle in

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[88]U.S., Department of the Navy, Bureau of Supplies and Accounts, Proceedings of the Navy Supply Conference, April 6-8, 1964, p. E-7.

[89]DOD, Supply Management Reference Book, p. 18.

[90]U.S., Department of the Navy, Naval Supply Systems Command, "Management of the Navy Supply System," Presentation to the NAVSUP Executive Board by CDR W. A. Chadwick, November 28, 1967.

attempting to interpret the meaning of these words, but rather than belabor the point, let us suggest use of the word "management." This word has a broad meaning and can encompass all of the foregoing; it is also appropriate since NAVSUP has been acknowledged as the Navy's Supply Manager.

Having proposed the word "management" to describe NAVSUP's supply system responsibility, let us now provide a connotation for the term and see how it relates to NAVSUP's situation. A management system, according to Young, is a subsystem of an organization. In relating this to the subject of control he states that "the management subsystem can be viewed as the basic control component of the organization, and, in this context, the functions of management and control become synonymous."[91] Applying this concept to the Navy Supply System, the system manager -- NAVSUP -- should have implicit ability to control its operation. In other words, NAVSUP would have authority to influence output and adjust resources as circumstances change. We have already seen that this is not so in many cases; therefore, NAVSUP's "management" authority as the Navy's Supply Manager is subject to reservation. Let us explore this matter further.

In January 1966 the incumbent Chief of BUSANDA, Rear Admiral H. J. Goldberg, made a presentation to the Chief of Naval Material which included a description of how BUSANDA manages. In describing the Navy supply distribution system, he noted that it included many activities which were not under BUSANDA's control and which had primary functions other than supply

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[91]Young, pp. 15 and 26.

(e.g., shipyards, air stations). Admiral Goldberg continued:

> Some people think we in S & A [BUSANDA] run the Navy's supply system. This is far from the truth. No one person or organization does.[92]

In describing his degree of control over the non-BUSANDA managed supply distribution activities, Admiral Goldberg said only that he furnished supply guidance to them. He made no pretense that he directed or controlled the supply functions at these activities. Instead he said:

> . . . it's hard to see how this complex could be called a system. But, believe me, it is! There is an interaction and interdependence among all of these activities and a common purpose.
>
> Although no one organization in the Navy controls the whole complex, BUSANDA exercises the most influence and it is our influence that welds this complex into a system.[93]

So without claiming even a measure of control over these activities, Admiral Goldberg acknowledged that BUSANDA was limited to the exercise of "influence."

There is little doubt that the Navy's bureau system has been a prime deterrent to the adequate definition of the Navy Supply System and the fixing of unqualified responsibility for its management. Bureaucracy in the Navy is almost legendary and over the years has proven to be a formidable obstacle to change. James E. Hewes wrote that the "Army and Navy have been powerful bastions of bureaucratic conservatism" and have opposed change

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[92]H. J. Goldberg, "BUSANDA Problem Briefing," Presentation Delivered at Chief of Naval Material Management Information Center, January 5, 1966.

[93]Ibid.

for its own sake.[94] Above all, he notes, bureaucratic organizations are concerned with preservation of their traditional independence.

An interesting observation of this phenomenon was made by the Chief of BUSANDA in the year in which the Naval Supply Plan was implemented. Rear Admiral W. A. Buck said:

> A war development that is a very strong influence in the Departmental organization and operation is that of the complete feeling of responsibility and desire for authority that has been developed in the various bureaus. That is of particular significance to us as a service organization rendering functional or specialized service to all bureaus. The pressure of war on each bureau chief brought a more acute and direct feeling of responsibility for whatever category of material he was responsible for. They in turn developed much more of a desire to handle all of the phases of that logistic operation rather than to delegate. They are not comfortable in a situation where another bureau not directly under their control shares that responsibility.[95]

Admiral Buck also commented on the situation as it pertained to field activities:

> We find ourselves as a service bureau held responsible for a supply or fiscal function in a field activity under the direct management control of another bureau. This is a new situation and it is not without its difficulties.[96]

The circumstances noted by Admiral Buck in 1947 have continued to the present day. For example, in its report to the Dillon Board the BUSANDA Component Study Group, in discussing the evolution of the Navy Supply System, stated that the technical bureaus never completely divorced themselves from supply

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[94] James E. Hewes, Jr., "Management vs. Bureaus," Marine Corps Gazette, Vol. 51 (February 1967), pp. 39-41.

[95] U.S., Department of the Navy, Bureau of Supplies and Accounts, Conference of Supply Corps Officers, Sept. 29-Oct. 4, 1947, p. 47.

[96] Ibid.

functions.[97] Further, the report commented that authority over all functions having a significant effect upon the administration of the supply system is not centralized at any level subordinate to the Secretary of the Navy. Despite this fact, the report indicated that BUSANDA was generally looked to when questions of supply effectiveness or responsiveness arose.[98]

The existence of multiple-bureau responsibility in the area of supply management was one of the primary reasons why NAVLOGSIP objective number four was established to define the supply system and designate the responsible organizational elements. NAVLOGSIP stated that about 50,000 items were retained by the developing bureaus for management. It also stated that there was a popular belief that management of all aspects of these items was a responsibility of BUSANDA, whereas in reality supply management functions are performed in all material bureaus for bureau controlled and production material.[99]

Insofar as the role of non-BUSANDA field activities, their use as part of the Navy supply distribution system was a conscious act. In the review of a new directive aimed at increasing the effectiveness and efficiency of the supply system, conferees at the 1954 BUSANDA Field Conference were told that one of the objectives was to provide supply support of fleet and minor shore activities from adjacent stock points, regardless

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[97] BUSANDA, Report of Component Study Group, enclosure 17, pp. 19-20.

[98] Ibid., p. 12 of basic report.

[99] Navy Logistic Support Task Force, Navy Logistic Support Improvement Plan, pp. II-1 through II-3.

of bureau management lines. It was noted that a potential problem existed in the assignment of service-wide supply functions to non-BUSANDA managed activities. However, the committee which made the report felt that performance of some degree of service-wide functions was acceptable to the parent bureaus of these activities.[1]

Rear Admiral Arnold, Chief of BUSANDA at the time, stated that "we have been talking for many years of having an integrated supply system" and further that "one of the ways it works is that we use the capacity of a given stock point, no matter what its prime purpose is, as an element of the supply distribution system."[2] He did note, however, that budgetary difficulties existed at air stations. By and large the conferees were optimistic about the use of non-BUSANDA managed field activities and the cooperation of their parent bureaus. However, despite the sensibleness of the policy, it committed BUSANDA to a course of action which worked to remove increasingly large quantities of material from activities under its direct control.

The Dillon Board took cognizance of the vagueness of the Navy Supply System and of BUSANDA's responsibilities; the Board made recommendations which, in its view, would make the Chief of BUSANDA "truly the Navy's Supply Manager." The Board's report stated that BUSANDA "should be the primary technical bureau of the Naval service . . . concerned with material management in its broadest sense" and that "in its strengthened

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[1]BUSANDA, 1954 BUSANDA Field Conference, pp. 178-179.

[2]Ibid., p. 182-183.

position, the Bureau of Supplies and Accounts would be the material management agency for the Naval Support establishment."[3]

It goes without saying, however, that recommendations of a study group, no matter how "high powered," do not assure automatic acceptance and implementation. Captain J. H. Garrett, in reviewing the Dillon Report before the 1963 Navy Supply Conference, noted that it contained many references regarding the idea that the Chief of BUSANDA would have a stronger hand in his role as the Navy's Supply Manager. But he noted that the report lacked specific recommendations on "just how these many fine-sounding words and phrases can be implemented."[4] The Dillon Report did result in some basic changes to the Navy organization -- primarily the placing of the Chief of Naval Material over the material bureaus -- but the basic questions regarding the Navy Supply System and the role of BUSANDA (NAVSUP) remain with us.

Lest there be any remaining question about the limitations of BUSANDA's control of the Navy supply support organization, let us touch upon the subject of funds control. It is axiomatic that the organization which provides the funds will have far more than a casual interest in how they are spent. For our purposes, the funds which are of interest are those for both procurement of material and operation and maintenance of field activities.

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[3]U.S., Department of the Navy, Review of Management of the Department of the Navy (NAVEXOS P-2426A), December 15, 1962, pp. 101-103 and 147-148.

[4]BUSANDA, Proceedings of the 1963 Navy Supply Conference, pp. L9-L10.

In the case of material, recall that the Navy Supply Plan recommendation, as approved, was that all replenishable items in the Navy Supply System would be financed by the Naval Stock Fund. The stipulation about replenishable material would generally exclude material which is properly managed by a technical bureau. BUSANDA, as the manager of the Naval Stock Fund, would then control the funds for the procurement of all other material. However, this has never been the case. Through the years much of the technical material has been financed by the "Appropriation Purchases Account" under the control of the technical bureaus. At present there is only one major category of material which is totally funded in this fashion -- aviation material. Hence the Naval Air Systems Command (NAVAIR) continues to have an inordinate interest in the management of this material. The impending implementation of the DOD Resources Management System, however, could alter this situation since it requires the stock-funding of all consumable material.

As for operations and maintenance (O&M) funds, each field activity is dependent upon its parent bureau or command. Thus NAVSUP controls O&M funds only for the activities under its management control. The split-funding arrangement for shipyards has already been discussed; it still exists for certain shipyards but action is underway to divorce the NAVSUP and NAVSHIP interests. In the case of air stations there has never been a split-funding agreement, so NAVAIR has had the total responsibility for funding of these activities, including the system-wide supply support functions. This is also true of many other activities which are of minor import to the supply system.

Again, the words of Admiral Buck in 1947 are pertinent. He said, "it is my firm belief that when you do not control the money for the performance of a function for which you are responsible, you do not control the function."5 He also stated that "there is no satisfaction in attempting to be the man responsible for a function when you have to go to other bureaus and obtain funds for that function by the process that I describe as the 'tin cup method.'"6

It is now twenty-one years since the implementation of the Navy Supply Plan and there are still doubts as to the limits of NAVSUP's authority in the management of the Navy Supply System. This is exemplified by the fact that it was deemed necessary, in November 1967, to present to the new Commander of NAVSUP a current interpretation of what the Navy Supply System is and what his responsibilities are in managing the system.7

Nobody, it seems, would advocate the complete control of supply matters by NAVSUP. For example, the report of the BUSANDA Component Study Group to the Dillon Board, even though noting the problems occasioned by fragmented authority and responsibility in the supply system, stated that "complete centralization in BUSANDA is considered neither practicable nor desirable."8 However, the report did say that a more precise definition of

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5BUSANDA, 1947 Conference of Supply Corps Officers, p. 47.

6Ibid., p. 49.

7NAVSUP, Presentation to the Executive Board by CDR Chadwick, November 28, 1967.

8BUSANDA, Final Report of BUSANDA Component Study Group, p. 13.

responsibilities, and provision in fact for BUSANDA technical direction over supply functions, would lessen the problems. There must be a middle ground somewhere -- but will bureaucratic emotionalism ever permit a rational solution?

Other Considerations

The subject of theoretical organizational considerations is well beyond the scope of this paper and in any event is covered quite extensively in the management literature. However, there are practical considerations which must be considered. Many have already been discussed at some length and need not be explored further. Following is a recap of these matters for the sake of convenience:

1. Economy. The pressure for economy is inexorable and has led to a number of base closures and consolidations, as discussed in Chapter III. It will continue to have a strong influence on future organizational actions.

2. Centralization. As stated at the 1963 Navy Supply Conference, "it is hard to escape the conclusion that the trend toward centralization is inevitable."[9] In connection with the establishment of DSA, Dunlap and Associates described the upheaval in the organizational structure of DOD supply and logistics components as a "bloodless revolution."[10] The effect upon the Navy supply support organization was described in Chapter III.

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[9]BUSANDA, Proceedings of the 1963 Navy Supply Conference, p E8.

[10]Dunlap and Associates, The Navy Supply System Ashore, p. 3.

3. Pressures on the Navy Supply System. These pressures come both from within the Navy (e.g., the technical bureaus) and from external sources such as Congress, DOD and DSA. At the 1961 Commanding Officers' Conference it was noted that there are differences of opinion within the Navy as to the proper shape and scope of the supply organization.[11] In 1968 these differences are as pronounced as they ever have been.

4. Influence of ADP. Although mentioned only briefly heretofore, it is a fact that the rapid development of ADP capability has had a dominant influence in the field of supply in recent years. It is the vehicle which has made possible much of the centralization, unification and standardization which mark the current supply support organization and modus operandi. Rear Admiral John Crumpacker, former Chief of BUSANDA, wrote in 1962 that ADP has made possible the first real integration of service supply systems.[12] There is no doubt that ADP will continue to play a key part in shaping the future supply support organization.

In addition to the above, there are three topics which have been briefly discussed and which merit elaboration: (1) the requirement for control, (2) aviation supply; and (3) the area support concept.

The Problem of Control. Perhaps the central question regarding the character of the Navy supply support organization is that of control. As the Navy's Supply Manager, how much

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[11]BUSANDA, 1961 Commanding Officers' Conference, p. OL-8.

[12]John Crumpacker, "The Navy Supply System: Where It's Been, Where It's Going," Naval Review, (Annapolis: United States Naval Institute, 1962), p. 274.

control does NAVSUP need over the various elements of the supply system? In accordance with Young's description, management and control can be considered synonymous. So, as the Navy's Supply Manager, NAVSUP must have control over the supply system if it can rightfully claim the title of "manager." However, it is a certainty that nobody would advocate absolute control in a vertical supply organization extending down to the smallest ship or station. But where do you draw the line?

An answer to this question is difficult to find. However, part of the answer must lie in the fact that there are different types and degrees of control; hence, what is necessary for one situation may be totally inappropriate for another. E. H. Anderson differentiates among line, staff and functional relationships and observes that, as organizations go through an evolutionary process, they will experience the need for adjusting, adapting and reorganizing. For example, a staff organization may grow in stature and importance and be granted functional authority, empowering it to issue binding instructions to other organizational units rather than merely providing advice. The functional officer exercises control over his function throughout the organization, normally by requiring conformance with certain procedures or regulations. In turn, the functional organization may grow in importance to the point where its output is identified as a distinct product or service, thereby earning it the designation as a line unit performing one of the operations of the enterprise.[13]

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[13]E. H. Anderson, "Line, Staff and Functional Relationships," Current Issues and Emerging Concepts in Management, ed. Paul M. Dauten, Jr. (Boston: Houghton Mifflin Company, 1962), pp. 227-228.

For our purposes, the distinction between line control and functional control expresses the necessary relationship. NAVSUP has line authority over field activities under its management control, but only functional authority over supply operations at other activities. In terms of Anderson's article, management should be alert to changing circumstances which may dictate a modification to the existing line or functional organization. In other words, does a supply department at a given activity fulfill the requirement or should a supply center be established? The answer to such a question is largely subjective, but it must be a function of the size and scope of supply operations being performed.

A parallel can be drawn between the treatment of supply functions and virtually any other function performed at a Naval activitiy; e.g., personnel, communications, medical. Each of these functions is the responsibility of a particular headquarters activity, so if a vertical organization were to be established in each of these areas it would result in the splintering of each field activity into innumerable separate commands. Such a situation would be intolerable, but at the other extreme the lumping of all functions, regardless of size, scope or complexity, into a huge single field activity may be equally intolerable. The question becomes, "At what point does a function achieve such size and importance to the responsible headquarters command that it should be broken off and managed separately?" For the answer we must consider the question of funds control. In the case of supply functions, NAVSUP does not control the funds for supply operations at non-NAVSUP managed activities (except that split-funding still exists at some

shipyards). Therefore, if NAVSUP's functional control requirements exceed the availability of resources at a given field activity, a problem arises. This same situation could exist for other functions, but the sheer volume of clerical and materials-handling workload associated with a large supply activity could present a problem of much greater magnitude than, say, requirements imposed by a change in communications procedures.

This paper has already discussed the fact that NAVSUP does not have control over certain major segments of the supply distribution system. By way of comparison, Lieutenant General McNamara had this to say about command jurisdiction over DSA depots:

> DSA requires that it have command jurisdiction over distribution depots where it is the dominant user for the same reasons that the military services require that they exercise control of the distribution facilities where the items they manage are stored and issued. In other words, DSA must have complete control of the supply system for DSA-managed commodities to provide for unity of command and undivided responsibility for management of common supplies.[14]

Apparently General McNamara was unaware that the Navy's Supply Manager did not enjoy the same degree of control as he was describing for DSA!

Without attempting to specify finite criteria, let us assert that NAVSUP should have line authority over Navy ICP's and major distribution activities, and functional control over supply operations at other activities. The determination of what constitutes a "major" distribution activity would be primarily based upon the dominance of supply system workload versus station support workload. Only by direct control of such

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[14]BUSANDA, 1962 Navy Supply Conference, p. D-8.

major supply activities can NAVSUP truly claim to be the Navy's Supply Manager. Without such control NAVSUP can act only in a staff capacity to a supply manager at a superior organizational level, whoever that might be.

Aviation Supply. Turning now to the topic of aviation supply, it has already been noted that the normal pattern does not apply. Through the years Naval aviation has often been accused of being a "separate Navy," and some of the current circumstances do nothing to destroy the myth. It is ironic that aviation material, for which the first SDCP was created, is the last major category which is not stock funded. Thus NAVSUP is not directly involved in funding for procurement of aviation material. In addition, there has never been an O&M funding arrangement at major air stations whereby NAVSUP has joined in partnership in order to discharge its supply system responsibilities. The matter is even more involved at the present time since major air stations are now commanded and funded by fleet commands, thereby completely removing them from the naval material organization.

To gain an appreciation of the scope of this segment of the supply system, a degree of specificity is necessary. Of the many air stations in the Navy, only seven are of sufficient size, supply-wise, to be considered major wholesale stock points for aeronautical material. These are the seven "industrial Naval air stations" (INAS's) at Norfolk, Jacksonville, Quonset Point, Pensacola, Alameda, North Island and Cherry Point. These seven INAS's together carry $2.1 billion of the Navy's total inventory of $9.5 billion, or 23 per cent of the total. In

terms of volume of business, the INAS's make 20 per cent of all the issues in the Navy Supply System. When considering only peculiar aeronautical material, the figures are all the more impressive. The INAS's have in their possession 70 per cent of all Navy aeronautical material ($1.5 billion of $2.2 billion) and process 69 per cent of all Navy issues of this material.[15]

By any measure the INAS's are very important elements of the Navy Supply System. Yet the Navy's Supply Manager has a very limited voice in the operation of this element. NAVSUP's functional control is devoid of meaning when resources at the INAS's are not made available to carry out NAVSUP policies and procedures or when conflicting directives are issued by the agency which has line control authority. Such instances have not been uncommon.[16] The fact remains that aviation supply has retained a character of uniqueness which seems to have resisted, at least in part, the trend toward standardization and centralization.

Area Support Concept. In recent years the "area support concept" has been advanced as the prime method of reducing duplicative inventories and achieving economies in supply operations. Under this concept all wholesale levels of material in a given area are consolidated under a Naval Supply Center, with other activities in the area satellited off of the NSC and holding only retail levels of material as required for local support.

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[15]NAVSUP, Presentation to the Executive Board by CDR Chadwick, November 28, 1967.

[16]BUSANDA, Final Report of BUSANDA Component Study Group, encl. 13. p. 5.

Early efforts at area support concentrated only on selected activities in an area. For example, the Bay Area Support plan in the San Francisco area involved NSC Oakland and the two local shipyards at Mare Island and Hunter's Point. A major migration of material from the shipyards to the NSC took place in 1959-1960, resulting in a reduction of about 70 per cent in the range of material carried by the shipyards and a personnel savings estimated at 300-400.[17] Similar consolidations have taken place at NSC Norfolk, first from the shipyard and later from the air station. As significant as these actions were, they amounted to only partial consolidation and did not involve all activities in the area.

A more ambitious undertaking was begun in the San Diego area in 1966. Recognizing the potential benefits of the plan, CNO approved a test at San Diego whereby all wholesale inventories at all activities in the area would be managed by NSC San Diego.[18] In some cases the consolidation involves physical movement of material to the NSC while in other cases substantial quantities of material are left in their original location, near the point of greatest use (e.g., aviation material at air stations). The important point is that all wholesale levels of material are centrally managed by the NSC, with heavy reliance upon the use of responsive on-site retail outlets, rapid communications and central data processing capability. In addition to anticipated economies in operations and inventory investment, the area

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[17]Roland A. Petrie, "The Bay Area Supply Support Pattern," Thesis Submitted to U. S. Naval Postgraduate School, Monterey, 1965, pp. 45-46 and 57.

[18]Letter from the Chief of Naval Operations to the Chief of Naval Material, serial 84P41, dated February 23, 1966.

support concept serves to reduce the span of management at activities supported by the NSC, thereby freeing management attention for matters more directly related to the primary mission of the supported activities.

A thorough evaluation of the San Diego test has yet to be made. Notwithstanding, NAVSUP is committed to the area support concept.[19] Considerable progress has already been made, and still greater progress is promised in the near future when increased data processing capability will permit individual item control at multiple locations. Full acceptance and implementation of the concept will have the effect of giving NAVSUP control over all wholesale levels of material in the supply system, since the hub of supply activity in each area will be a Naval Supply Center under NAVSUP's management control. To this end the establishment of NSC's at Charleston, Long Beach and Puget Sound constitute important steps toward future application of the area support concept since these activities will be the nucleus of the plan in their respective areas.

Summary

In this chapter some of the difficulties and "facts of life" surrounding the organization for Navy supply support have been discussed. In particular, there has never been an adequate definition of the Navy Supply System which has met with universal acceptance. This has complicated the role of NAVSUP since, as the Navy's Supply Manager, there is doubt as to the extent of

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[19]NAVSUP, Presentation to the Executive Board by CDR Chadwick, November 28, 1967.

its authority over a system possessing ill-defined boundaries. Further, there are practical limits to NAVSUP's control over supply matters since it is widely acknowledged that virtually every ship and activity in the Navy has some part to play in the process. It is unnecessary and unthinkable that NAVSUP should have direct control over supply matters at all of these activities.

The question of control is one of degree. Line control by NAVSUP is necessary only in the case of major supply activities, which have a significant supply system responsibility. The large majority of activities support primarily themselves, with supply system involvement of little consequence. For these activities, the exercise of functional control over supply matters is all that is necessary for NAVSUP to discharge its responsibility as the supply manager.

Other factors which have a bearing on the current supply support organization are the continued distinctiveness of aviation supply and the emergence of the area support concept as NAVSUP's master plan for the future.

CHAPTER V

EVALUATION OF THE PRESENT ORGANIZATION

The evolution of the Navy supply support organization has been traced up to the present time and some of the factors which bear upon the present organization have been reviewed. Let us now proceed with the task of describing and evaluating the present organization.

Description

The present Navy supply support organization, while considerably changed from the 1947 version, nevertheless retains many of its basic characteristics. There are still inventory control points which are the "nerve centers" of the supply support complex, and of course there are still storage/distribution activities. Much has been learned since 1947 about advanced inventory management techniques. Procedural changes, new management concepts and mechanization have all made their mark. The supply support organization has had to adapt to these and to all of the changes which have been discussed previously.

The number of Navy inventory control points has dwindled to three: ASO, ESO and SPCC. Since DSA has taken over the inventory management of common material, the Navy ICP's are left with only that material which is peculiar to Navy equipments. This fact has served to alter the nature of Navy ICP's. Whereas

inventory control had been the major effort of ICP's in years past, the emphasis has now shifted to weapons system support. The term "inventory control point" is really descriptive of only a minor part of the effort of these three activities. Perhaps the term Weapons System Support Center would be more appropriate, since these activities are heavily concerned with assuring allowance list support for weapons systems, regardless of whether the material comes from a Navy source, a DSA source or whatever.

In addition to the three NAVSUP-managed ICP's, Navy inventory managers also include the System Commanders (ex-bureaus) and Project Managers. These commands are responsible for managing items in a research and development state, items of unstable design, end items of major importance, and certain reparable items for which engineering decisions or configuration control is essential. System Commanders and Project Managers manage about two per cent (less than 30,000) of all Navy items, but this represents about 34 per cent of the total money value of Navy managed inventories. Inventory management for the remainder of Navy material is the responsibility of the three NAVSUP-managed ICP's.[20]

The Fleet Material Support Office is now the only Navy Retail Office, and as such has the responsibility to budget for the procurement of items managed outside of the Navy (primarily by DSA) and administer allotments to the stock points who effect the actual procurement.[21] Separate retail offices for various

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[20]BUPERS, Supplying the Navy, p. 12.

[21]Ibid., p. 51.

commodities of material had been created initially, as explained in Chapter III. However, it was subsequently determined that these functions were not sufficiently distinctive, so all retail management functions were consolidated at FMSO.

The major distribution activities at the present time are listed in Table 3, along with the number of items carried and the dollar value of inventory at each activity. The preponderance of supply system wholesale inventories is located at these twenty-one activities, consisting of seven supply centers, two supply depots, five shipyards and seven air stations. There is no convenient or fully acceptable way to differentiate between wholesale and retail inventories, but since the twenty-one major stock points hold something less than half of the dollar value of all supply system inventories, a few words of explanation are in order.

In the case of Navy Stock Account (NSA) material, the $459 million of material not in the custody of the major stock points is widely dispersed. There are about 165 shore stations which carry primarily "retail" inventories to satisfy their own organic requirements, with only an incidental requirement to furnish material to others. In addition, the Navy Stock Fund finances the resale inventories of some 80 commissary stores and 700 ship's stores, as well as the NSA inventories of 43 tenders and repair ships. When considering the large number of activities which hold NSA inventories, it becomes more apparent that a substantial percentage of these inventories is concentrated at the major stock points.

TABLE 3

MAJOR STOCK POINTS IN THE NAVY
SUPPLY SYSTEM - 1968
(Continental U. S. only)

Activity	Line Items Carried(a)	Dollar Value of Inventory (Millions)(a)	
		NSA	APA
NAVSUP Managed			
NSC Norfolk	841,934	108.9	333.4
NSC Oakland	891,141	89.2	356.0
NSC Charleston	308,471	56.0	254.5
NSC Long Beach	146,745	17.7	101.3
NSC San Diego	196,420	24.7	54.1
NSC Puget Sound	187,442(b)	24.3(b)	67.2(b)
NSC Newport	70,281	15.2	8.1
NSD Mechanicsburg	28,737	6.0	189.7
NSD Philadelphia	107,631(c)	0.2	0.0
Total dollar value		342.2	1,364.3
Non-NAVSUP Managed			
NSY Boston	47,858	6.7	97.7
NSY Norfolk	48,507	6.5	128.0
NSY San Fran. Bay	18,063	4.9	176.3
NSY Philadelphia	74,672	15.6	60.1
NSY Portsmouth	23,547	3.8	28.5
NAS Alameda	266,021	3.6	522.0
NAS North Island	319,784	2.6	513.2

TABLE 3 -- Continued

Activity	Line Items Carried	Dollar Value of Inventory (Millions)	
		NSA	APA
Non-NAVSUP Managed			
NAS Jacksonville	298,390	8.3	253.9
NAS Pensacola	203,051	4.9	186.4
NAS Quonset Point	182,690	3.8	191.9
NAS Norfolk	190,079	0.6	394.0
MCAS Cherry Point	195,938	4.2	234.1
Total dollar value		65.5	2,786.1
Total dollar value -- major stock points		407.7	4,150.4
Total dollar value -- Navy Supply System		866.6	9,039.5

Notes:

(a)As of June 30, 1967.

(b)Figures are combined for NSY Puget Sound and NSD Seattle, predecessors of NSC Puget Sound.

(c)Primarily blank forms and publications.

As for APA material, there is a total of 153 activities which hold this material. Much of the dollar value not controlled by the major stock points is located at ordnance activities; ammunition, which for most purposes is not considered a part of the Navy Supply System, accounts for about $2.8 billion of the APA inventory. Much of the rest of the APA inventory not at the major stock points is comprised of the high cost, low turnover "bureau controlled" material (complete equipments and major components) which normally does not require storage at readily accessible tidewater locations.

Table 3 vividly portrays the relative importance of the seven air stations, as described in Chapter IV. By way of contrast the shipyards now play a much less prominent role as elements of the supply system. Three of them -- Charleston, Long Beach and Puget Sound -- are no longer included in the list of major stock points. The inventories at Norfolk and San Francisco Bay are considerably reduced from their former proportions because of the proximity of NSC's Norfolk and Oakland and the fact that area support arrangements have been consummated. All told, the present reduced role of shipyards reflects the progress of the NAVSHIP/NAVSUP program to relieve shipyards of system supply support responsibilities. This same effect can be seen in the very small inventory of NSA material at NAS Norfolk, which has an area support arrangement for this material with the supply center.

The major stock points carry all types of material, regardless of who the inventory manager of the material might be. Thus, for example, supply centers have custody of material

managed by System Commands, and air stations stock considerable quantities of non-aeronautical material. All stock points carry appropriate quantities of DSA managed material. In other words, a headquarters command's management responsibility for a given stock point bears no particular relationship to the inventory management responsibility for the material stocked at that activity.

The Navy's Supply Manager, NAVSUP, is the command which is most directly concerned with the operation of the supply system. The NAVSUP field organization is the primary instrument through which this responsibility is discharged. NAVSUP has line authority over its field organization (the ICP's, the retail office, the supply centers and supply depots), and functional authority over supply operations at other activities, including shipyards and air stations. This functional authority is given substance in General Order No. 19, which states that "officials charged with command . . . responsibilities shall discharge their responsibilities with due regard for the system-wide aspects of support efforts where service-wide systems control responsibilities have been assigned."[22] The Navy Supply System is cited as an example of such a service-wide system.

Evaluation and Prospects for Future Change[23]

The present Navy supply support organization has a totally different complexion than that of twenty years ago. The pressure

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[22]U.S., Department of the Navy, General Order No. 19, October 20, 1964.

[23]Some of the ideas included in this section were gained from discussions with CDR W. A. Chadwick, Head, Advance Plans Branch, Naval Supply Systems Command, during the period January 2, 1968 through March 8, 1968.

of past events and the erosion of time have had a considerable effect upon the shape and scope of the organization. Economy measures have reduced the number of supply activities to a point where it is difficult to imagine how further reductions can be effected (except that certain consolidations can be brought about under the area support concept). Meanwhile, the Navy supply organization has become incapable of independent, complete support; the Navy Supply System can now be considered to be in partnership with DSA, and therefore is a component of the DOD Supply System.

Within the Navy supply distribution system there are still several major stock points which are beyond the management control of NAVSUP (Table 3). As has been noted previously, the scope of supply system operations at shipyards is but a fraction of what it had been years ago. The NAVSHIP/NAVSUP program to divest shipyards of supply system responsibilities is still in force, and there is every reason to believe that it will be completed in due course. With the progress made to date, inventory levels at the shipyards generally are already within tolerable limits. However, the seven industrial air stations stand out in marked contrast. These activities are indeed major elements of the supply system, yet are only nominally under the influence of the Navy's Supply Manager. As far as field activities are concerned, the seven INAS's are the outstanding example of the limitations of NAVSUP's control over the supply system.

While the role of NAVSUP as the Navy's Supply Manager is still subject to debate, it appears that a better blueprint exists now than has previously been available to extend NAVSUP's influence over the supply system. That blueprint is the area support plan. Area support offers the potential of at once accommodating many of the pressures upon the supply organization and alleviating some of the difficulties caused by divided responsibility. In particular, full implementation of the area support concept should result in the following:

1. Maximum potential for economy in supply operations and inventory investment.

2. A high degree of utilization and exploitation of centralized computer facilities.

3. Increased supply system responsiveness by virtue of having a larger pool of accessible back-up inventory in each area.

4. Freeing the time of managers at supported activities so that more of their attention can be devoted to their primary mission.

5. Placing of the large majority of wholesale supply system inventories under the custody of Naval Supply Centers and thereby under NAVSUP's line authority and funding control.

6. Adherence to a basic principle of the impending DOD Resource Management System in that O&M funds for major supply operations will flow from NAVSUP, who in large measure is ultimately responsible for the supply system workload.

Full acceptance of the area support plan would coincidentally eliminate one of the major distinctions of aviation supply, the custody of most of this material by activities not under NAVSUP's management control. The other major distinction, funding of aviation material through the Appropriation Purchases Account, is scheduled to be eliminated in conjunction with implementation of the Resource Management System on July 1, 1968.

The above description of the potential merits of the area support concept should not be taken to mean that NAVSUP's problems are over. Area support is far from being a fait accompli since the first real test has yet to be completed and evaluated. The keynote to its success is acceptance -- acceptance by the supported activities, by fleet commands and by headquarters commands. Strong resistance is, in fact, being experienced from aviation commands. A natural skepticism is to be expected from the field activities (and their superior commands) who in the past have controlled their own inventories and who now are most assuredly looking to NAVSUP with a "show me" attitude. It therefore behooves NAVSUP to diligently apply its efforts to assure the success of the plan. Dynamic and imaginative leadership, coupled with a sincere effort to prove the worth of the plan to others, are essential to insure that the objectives of area support are achieved. A lesser effort can lead to failure -- failure of acceptance -- and with it the loss of a real opportunity to overcome some of the difficulties which have persisted throughout the life of the Navy Supply System.

On the subject of the Navy Supply System, there is no intention that this paper will contribute to the growing list

of suggested definitions. However, certain observations are appropriate based upon some of the points discussed in the paper.

The evidence suggests the existence of a basic dilemma caused by the apparent incompatibility of, on the one hand, defining the Navy Supply System to embrace all facets of supply throughout the Naval Establishment, and on the other hand assigning NAVSUP the responsibility for administering this system, even though the system extends far beyond the limits of NAVSUP's direct authority. This dilemma can perhaps be resolved by, first of all, acknowledging that absolute control of the entire supply system by NAVSUP is not necessary, and then carefully delineating the degrees of control necessary over the various segments of the system. The distinction between line control and functional control is important to this case, and proper application of these two types of control should serve to clarify and reinforce NAVSUP's role as the Navy's Supply Manager. To this end the following comments and opinions are offered:

1. The Navy Supply System must be defined to include all types of material, regardless of whether inventory management is performed by NAVSUP managed ICP's or System Commanders. The definition must also be inclusive of all activities and commands which play a part in the system, again without regard to management responsibility.

2. NAVSUP's line control need extend only to those key activities which have major supply system responsibilities and which together control the preponderance of wholesale system inventories. These activities are the ICP's and the major stock

points, with necessary control of the latter to be achieved via the area support plan as described above.

3. Functional control over the remaining elements of the Navy Supply System will suffice to give NAVSUP the necessary leverage to carry out its responsibility as the Navy Supply Manager. To be effective, however, this functional control must be recognized and accepted by all concerned, to an extent greater than now exists. Such control in fact, and not just in theory, is necessary to insure uniformity of supply policies and procedures and to provide true unity and integration within the supply system.

4. NAVSUP functional control over supply management operations of other System Commands and Project Managers is also envisioned since these commands control material which must be recognized as included in the overall Navy Supply System. Functional control in this area is a radical departure from presently existing practice, but it is not without precedent. For example, the preeminence of BUPERS in military personnel matters is acknowledged throughout the Navy, and even more to the point is BUMED's complete functional control in the area of professional medicine. While not pretending to equate the supply profession with the medical profession, the analogy is nevertheless pertinent in that the influence of the "system" manager must extend throughout the Navy.

With acceptance of the principles embodied in the above discussion, there should be no concern with a broad definition of the Navy Supply System which extends beyond the limits of NAVSUP's direct control. NAVSUP can adequately fulfill its

responsibilities by the proper combination of line control and functional control, provided that these forms of control are extended as indicated. Judging by past experience this is easier said than done, but acceptance of these principles by all concerned is essential if the Navy Supply System is ever to achieve true integration and unity.

While the present Navy supply support organization does not measure up to the above description, its responsibilities are, however, the same as they would be under the envisioned organization. The basic responsibility is, of course, support of the fleet and other Navy activities. As previously mentioned, the existence of DSA has altered the nature of the Navy supply management task so that the current thrust is on weapons system support and management of Navy owned material. Let us briefly touch upon these two tasks.

Since DSA controls most common material, Navy ICP's perform inventory control functions only for Navy peculiar material. However, the stock points must also be counted as participants in the management of Navy owned material because DSA, acting as a large supplier, treats Navy stock points as customers of its system. Responsibility for determination of requirements for DSA material is decentralized to individual Navy stock points, with the Fleet Material Support Office exercising fund control and providing inventory decision rules. Thus major stock points act in many ways as their own inventory control point for Navy-owned stocks of DSA material, while for Navy peculiar material they assume a more passive role as distribution points under the centralized inventory control of

the three ICP's. It may be said, then, that the Navy ICP's and major stock points share the total responsibility for control of Navy-owned material and that they are inextricably bound together in the management and distribution of Navy peculiar material. This fact argues for the indivisibility of ICP's, major stock points, and NAVSUP as the vital links in the chain of distribution, control and policy direction for Navy material.

Turning now to weapons system support, it has previously been stated that this has become the major responsibility of the ICP's. The focus here is no longer upon individual items of supply, but upon the weapons systems and equipments which these items support. It is in this arena that the true marriage between technical and supply functions now takes place. This is also the area of greatest sensitivity, since adequacy and responsiveness in the support of weapons systems is a prime concern of top commanders in the fleet and at Navy headquarters. Because of this, many of the problems associated with support of sophisticated new weapons systems have generated an abundance of criticism about the performance of the NAVSUP managed ICP's. It is beyond the scope of this paper to review the lengthy and complicated issues involved here or attempt to determine to what degree the criticism is warranted. Suffice it to say that the discontent has been severe enough to cause high level proposals for altering the organizational status quo. One such proposal is to transfer management responsibility for the ICP's from NAVSUP to the "hardware" System Commands (e.g., assign ASO to NAVAIR) and another is to establish a Logistics Command to embrace all logistics functions of the present System Commands.

Although serious consideration has been given to these proposals, there has been no action taken toward their implementation. However, it should not be implied that the issue is dead; continuance of knotty logistic support problems could cause a tidal wave of discontent which might well precipitate the demand for radical change.

Separation of the ICP's from NAVSUP's management realm would probably be a most unfortunate occurrence. As seen by this writer, it would result in the disintegration of any semblance of an integrated Navy Supply System since a vital link would be removed from the chain connecting the supply manager and his integral control and distribution activities. Such a move would tend in a direction opposite from that described for the further integration of the supply system, namely full implementation of the area support concept and extension of NAVSUP's functional authority over the remaining supply operations. There is no doubt that weapons system support is a critical part of the total supply effort; this is where the interface occurs between supply support and the maintenance and operation of Fleet equipment. However, efforts to improve weapons system support should proceed within a strengthened supply system rather than disembodying the system and permitting each System Commander to go his separate way. Should this happen, it is easy to envision the return to multiple supply systems such as existed in World War II.

So in weighing the prospects for future change, we must recognize that there are opposing forces which could cause the Navy supply support organization to take on quite a different

appearance. There seems little doubt that further changes will take place, but the nature and direction of change is quite unpredictable. The changes advocated in this paper would result in complete integration of the Navy Supply System, with area support and true functional control by NAVSUP being the prime ingredients. Slow progress in this direction is presently being made, with much depending upon the success of the area support test. At the opposite extreme is the complete abolition of the Navy Supply System as we now know it. This could occur should NAVSUP and its field organization fail to live up to the expectations and meet the requirements of the commands and activities which depend upon this organization for supply support. In view of recent pressures on the organization, it is not hard to take the pessimistic view; however, there are those of us who remain eternal optimists and are convinced of the efficacy of an integrated Navy Supply System. The objectives of the 1947 Navy Supply Plan have yet to be fully realized, but the basic concepts embraced by this plan are still considered sound.

It may be said that NAVSUP is at the hub of an organization which presently has some loose spokes, which must be either tightened or lost. However, so long as there is a Navy there will be a need for a supply support organization which is closely identified with its fleet customers. Whether this organization is built around NAVSUP or takes the form of a Logistics Command remains to be seen -- the next chapter in the evolution of the Navy supply support organization has yet to be written!

Summary

In this chapter the present organization for Navy supply support was briefly described. There are but three ICP's presently in existence, and twenty-one major stock points hold the preponderance of Navy wholesale inventories. Of these stock points, twelve are not under the management control of NAVSUP; five shipyards have a relatively minor role in the supply system, while seven industrial air stations have a major role.

Evaluation of the present organization centered on the degree of integration of the system under the control of NAVSUP. Complete integration can be achieved through full implementation of the area support plan and extension of NAVSUP's functional control over the supply system. Acceptance of these measures should alleviate many of the difficulties in defining the Navy Supply System.

There is at present a school of thought which would remove the ICP's from NAVSUP's control and another which would establish a Logistics Command to perform the entire range of Navy logistics functions. Prospects for change in this direction would produce a totally different supply support organization than the fully integrated Navy Supply System envisioned in this paper. However, regardless of the form which future change may take, there will continue to be a need for a Navy supply support organization which is responsive to the Fleet.

CHAPTER VI

SUMMARY AND CONCLUSIONS

Summary

Prior to World War II, BUSANDA played a dominant role in the supply support of the Navy. The Navy was relatively small and uncomplicated, and the tempo of operations permitted the use of cumbersome, closely controlled procedures for centralized procurement and distribution of standard stock material. However, the enormous and urgent demands of wartime, coupled with a rapid expansion in technical equipment to be supported, proved to be far more than BUSANDA's peacetime system could handle. The result was a fragmentation of the supply system into some thirty systems, most of them under the control of the Navy's technical bureaus. With such a dispersion of control, widespread duplication of many common items of supply was inevitable.

The need for revamping the Navy's supply system after World War II was very much in evidence. An extensive study of the matter culminated in approval of the Navy Supply Plan by the Secretary of the Navy on February 14, 1947. A basic feature of this plan was the recognition that supply and technical functions could be separately identified, and that there was a commonality in the supply functions which applied to all types of material. The Navy Supply System was built upon this foundation, with responsibility for supply functions placed under the province of

a single bureau, BUSANDA, and technical functions remaining with each of the technical bureaus. The supply and technical functions were brought together at a new type of field activity, called a supply-demand control point, under the joint control of BUSANDA and the cognizant technical bureau. An SDCP was to be established for each category of Navy material, patterned after the Aviation Supply Office, which had been created during the war. To complement these commodity oriented control points, Naval Supply Centers were established at Norfolk and Oakland for the distribution of material through a series of specialized component depots.

The Navy supply support organization, as it existed at the end of 1947, reflected both the effects of implementation of the Navy Supply Plan and the remnants of a grossly expanded wartime supply complex. The ensuing years have produced radical changes in this 1947 organization. Changes through the mid-1950's took the form of a modest contraction in the number of storage activities and the creation of additional SDCP's and component supply depots in furtherance of the Navy Supply Plan.

Since 1956 there have been two overriding factors which have caused wholesale changes to the supply support organization: a heavy demand for economy measures and a strong movement toward centralization and unification of military supply matters. Economy measures have been cited as the principal reason for disestablishment of fourteen major supply activities in the past ten years. As for the movement toward unification, creation of single manager operating agencies, and later of DSA, have had a profound effect upon inventory management within the Navy. This effect has been reflected in reductions both in the number of Navy

supply support field activities and the nature and scope of their operations. The trend toward centralization has also been evident within the Navy organization, due in part to the emergence of computers and their achieving of a position of importance as a tool of supply management. This internal Navy centralization has manifested itself in the reorganization of NSC's which eliminated the component depots, and in various consolidations of supply operations, including those resulting from area support arrangements.

Another important change in recent years has resulted from the NAVSHIP/NAVSUP program to divest shipyards of supply system responsibilities. This has already resulted in creation of three new supply centers and a reduction in wholesale inventories at certain other shipyards, with long range plans to complete the program.

In spite of all of the changes which have taken place since 1947, the objectives of the Navy Supply Plan have not been fully achieved. In particular, implementation of recommendation number one of the plan has not been fully accomplished in that NAVSUP's authority over the performance of supply functions is encumbered with some significant limitations. This situation must be considered incongruous since NAVSUP has been designated as the Navy's Supply Manager and has been assigned the responsibility for administration of the Navy Supply System.

Part of the difficulty is that there has never been an adequate, acceptable definition of the Navy Supply System. There is disagreement as to which commands and field activities should be included in the system and what material is properly

included. Consequently, NAVSUP's responsibility for administering the Navy Supply System is clouded by the uncertainty of determining precisely the nature of the thing to be managed.

In addition to the lack of a definition for the Navy Supply System, there are practical limitations to the extent of NAVSUP's control. System Commands and Project Managers have inventory management responsibilities for certain major equipment and items with unstable design characteristics. Virtually every ship and station in the Navy has some part to play in the overall supply process, and several stations which are not under NAVSUP's direct management control have a very sizable supply system responsibility. Since NAVSUP lacks funding control over activities which are not under its management control, the extent of its authority in these cases is necessarily limited.

In weighing the significance of these limitations, the type and extent of control necessary for NAVSUP to carry out its responsibility as the Navy's Supply Manager becomes a key question. This paper has approached the question in terms of line control and functional control. It is postulated that line control by NAVSUP is necessary only in the case of those major supply activities which have a significant supply system responsibility. For all other activities, functional control over supply matters is sufficient, so long as NAVSUP has the ability to enforce compliance with standardized supply policies and procedures.

Two other factors of significance to the current supply support organization concern aviation supply and the area support concept. Through the years aviation supply has maintained a

unique character and in many respects stands as the biggest deterrent to a truly integrated supply system. This situation is most pertinent at the present time; developments in the field of aviation supply could have a significant influence on the future supply support organization. In contrast to the separatist tendency of aviation supply is the area support concept. Under area support a Naval Supply Center would manage inventories of all wholesale material for all activities in a given area. The plan promises to achieve maximum economy in supply operations and inventory investment by integration of all wholesale inventories in an area, with appropriate retail levels positioned at supported activities. NAVSUP is committed to the area support concept as its master plan for the future.

The existence of DSA as the inventory manager for common material has altered the nature of the Navy supply job. The principal responsibilities of the Navy supply support organization are now weapons system support, inventory management of Navy peculiar material and management of a Navy organic distribution organization. Weapons system support has been a major effort of the ICP's in recent years, and shortcomings in this area have been the cause of considerable consternation. This had led to various proposals for reorganization, such as the transfer of ICP's to the appropriate "hardware" Systems Command and the establishment of an omnipotent Logistics Command. To date no action has been taken on these proposals, but the vital importance of weapons system support remains a prime consideration for the supply support organization.

The present Navy supply support organization is built around three inventory control points and twenty-one major stock points. The major stock points include five shipyards, which collectively play a relatively minor supply system role, and seven industrial air stations, which have major supply system responsibilities.

NAVSUP, which is designated as the Navy's Supply Manager, occupies a central role in the supply system but lacks authority commensurate with its stated responsibility, for reasons already mentioned. NAVSUP does not have line authority over all major supply activities, nor does it have a proper measure of functional control over other activities. However, difficult though it may be, full implementation of the area support plan and proper extension of functional control could bring about the true integration of the Navy Supply System. This would require acceptance of these measures by all Navy commands, and acceptance can be gained only if there is confidence that NAVSUP and its field organization can adequately fulfill their responsibilities. This is the challenge faced by NAVSUP, a challenge to realize the objectives of an integrated Navy Supply System in keeping with the basic concepts of the Navy Supply Plan of 1947.

Conclusions

From analysis of the information presented in this paper, the following conclusions are drawn:

1. The existence of many separate supply systems during World War II was an expediency, and the continuation of such a potentially inefficient operation could not be justified.

2. The Navy Supply Plan of 1947 provided the basic concepts for a considerably improved integrated Navy Supply System. Time has proven these to have merit.

3. Since 1947 there have been extensive changes in the size and scope of the Navy supply support organization, caused primarily by pressures for economy and the trend toward centralization and unification. Despite all of the changes, true integration of the Navy Supply System has not been achieved.

4. The basic problem preventing full integration of the supply system is a lack of agreement as to the nature and extent of authority required by NAVSUP, the Navy Supply Manager. There are some significant limitations on NAVSUP's authority at the present time.

5. True integration of the Navy Supply System can be achieved by full implementation of the area support plan and provision in fact of functional control by NAVSUP over supply operations at activities not under its line control.

6. Accomplishment of the necessary measures to achieve full integration of the supply system depends upon acceptance of these measures by all commands involved. In view of traditional bureaucratic resistance to change, this acceptance must be won by painstaking effort and the building of confidence by producing results. This requires strong, dynamic leadership with attention to the needs and requirements of operating commands.

APPENDIX A

RECAP OF ESTABLISHMENTS AND DISESTABLISHMENTS OF BUSANDA SUPPLY SUPPORT FIELD ACTIVITIES SINCE 1947
(Continental U. S. Only)

Activity	In existence in 1947	Established Since 1947(a)		Disestablished Since 1947(a)		In existence January 1968
		Development	Centralization	Centralization	Economy	
Storage/Distribution Activities						
NSC Norfolk	X					X
Cheatham Annex	X					X
General Supply Depot	X			Apr 58		
Aviation Supply Depot	X			Apr 58		
Ordnance Supply Depot	X			Apr 58		
Publications Supply Depot	X			May 51		
Ship's Supply Depot		Oct 48		Apr 58		
Fuel Supply Depot		Jul 51		Apr 58		
Special Weapons Supply Depot		Dec 51				X(b)
Yards & Docks Supply Depot		Mar 53		Aug 57		
Provisions Supply Depot		Sep 55		Apr 58		
NSC Oakland	X					X
Stockton Annex	X				Jun 65	
Fuel Annex	X			Nov 50(c)		
General Supply Depot	X			Nov 60		
Aviation Supply Depot	X			Nov 60		
Ship's Supply Depot	X			Nov 60		

APPENDIX A -- Continued

Activity	In existence in 1947	Established Since 1947(a)		Disestablished Since 1947(a)		In existence January 1968
		Development	Centralization	Centralization	Economy	
Ordnance Supply Depot		Apr 48		Nov 60		
Fuel Supply Depot		Nov 50(c)		Jun 62		
Yards & Docks Supply Depot		Oct 51		Nov 60		
Medical & Dental Supply Depot		Jul 52		Oct 57		
Nuclear Weapons Supply Annex			May 61(d)			X
NSD Bayonne	X				Aug 67(e)	
NSD Newport	X					X(f)
NSD New Orleans	X				Mar 47	
NSD San Diego	X					X(f)
Special Weapons Supply Annex		Dec 51		May 61(d)		
NSD Seattle	X				Oct 67	
NSD San Pedro	X				Nov 55	
Torrance Annex	X				Aug 51(g)	
NSD Mechanicsburg	X					X
NSD Scotia	X				Dec 59	
NSD Clearfield	X				Jun 62	
NSD Spokane	X				Jun 58	
Naval Clothing Depot, Brooklyn	X				Jan 51	
NASD Philadelphia	X					X(h)
NSD Great Lakes	X				Jun 66	
Navy Fuel Depot, Jacksonville		Apr 51				X
Navy Fuel Depot, Casco Bay		Aug 53			Dec 62	
Navy Fuel Depot, San Pedro		Nov 55				X
Medical & Dental Supply Depot, Edgewater		Jul 52			Aug 54	

APPENDIX A --- Continued

Activity	In existence in 1947	Established Since 1947[a]		Disestablished Since 1947[a]		In existence January 1968
		Development	Centralization	Centralization	Economy	
NSC Charleston		Jan 64				X
NSC Long Beach		Apr 64				X
NSC Puget Sound		Oct 67				X
Inventory Control Points						
Aviation Supply Office	X					X
Ordnance Stock Office	X				Jun 65[i]	
Ships' Parts Control Center	X					X
Electronics Supply Office	X					X
Submarine Supply Office	X				Apr 61[j]	
General Stores Supply Office	X			Jan 60[k]		
Clothing Supply Office	X			Apr 57[l]		
Yards & Docks Supply Office	X				Jun 63	
Navy Ship's Store Office	X					X[m]
Medical & Dental Supply Office		Jul 52		Dec 56[n]		
Fuel Supply Office		Aug 52				X[m]
Provisions Supply Office		Sep 52		Jul 56[o]		
Training Device Supply Office		Jul 56			Apr 59	
Forms & Publications Supply Office		Jan 57			May 64	
Single Manager Operating Agencies						
Military Medical Supply Agency			Jun 56	Jan 62		
Military Petroleum Supply Agency			Aug 56	Dec 61		
Military Industrial Supply Agency			Jan 60	Apr 62		

APPENDIX A -- Continued

Activity	In existence in 1947	Established Since 1947(a)		Disestablished Since 1947(a)		In existence January 1968
		Development	Centralization	Centralization	Economy	
Navy Retail Office						
Navy Subsistence Office			Jul 56			X(p)
Navy Medical Material Office			Jan 57		Jul 60	
Navy Clothing & Textile Office			Apr 57		Jul 66	
Fleet Material Support Office			Jan 62			X
Total Number of Activities	35	22	8	24	20	21

(a)Reasons for establishment and disestablishment correspond with the description given in Chapter III. Entries in the table are month and year of action.

(b)Presently called Nuclear Weapons Supply Annex.

(c)Fuel Annex became Fuel Supply Depot.

(d)Moved from NSC San Diego to NSC Oakland.

(e)Was known as NSC at time of closure.

(f)Presently designated NSC.

APPENDIX A -- Continued

(g)Property presently used by NSC Long Beach.

(h)Presently designated NSD.

(i)Known as Ordnance Supply Office, Mechanicsburg, since 1952.

(j)Known as Submarine & Reactor Parts Supply Office, Mechanicsburg, since 1959.

(k)Succeeded by MISA.

(l)Succeeded by NC & TO.

(m)No longer performs ICP functions.

(n)Succeeded by MMSA and NMMO.

(o)Succeeded by NSO.

(p)No longer performs retail office functions.

BIBLIOGRAPHY

Public Documents

U.S. Commission on Organization of the Executive Branch of the Government. Business Organization of the Department of Defense. June 1955.

U.S. Commission on Organization of the Executive Branch of the Government. Task Force Report on the Federal Supply System (Appendix B). January 1949.

U.S. Department of Defense. Supply Management Reference Book. June 1958.

U.S. Department of Defense. Supply Management Reference Book. January 1965.

U.S. Department of the Navy, Bureau of Naval Personnel. Logistic Support of the Navy, NAVPERS 10495. 1965.

U.S. Department of the Navy, Bureau of Naval Personnel. Supplying the Navy, NAVPERS 10487. 1967.

U.S. Department of the Navy, Bureau of Supplies and Accounts. An Evaluation and Program for the Long Range Development of the Navy Supply System. November 1, 1956.

U.S. Department of the Navy, Bureau of Supplies and Accounts. Appraisal of Reorganization of Naval Supply Center, Norfolk, Va. September 1960.

U.S. Department of the Navy, Bureau of Supplies and Accounts. Bureau of Supplies and Accounts Organization Manual (NAVSANDA Publication 70). April 1, 1950.

U.S. Department of the Navy, Bureau of Supplies and Accounts. 1961 Commanding Officers' Conference. April 1961.

U.S. Department of the Navy, Bureau of Supplies and Accounts. Conference of Supply Corps Officers. September 29 - October 4, 1947.

U.S. Department of the Navy, Bureau of Supplies and Accounts. Final Report of the Bureau of Supplies and Accounts Component Study Group, Part of Review of Management of the Department of the Navy. August 31, 1962.

U.S. Department of the Navy, Bureau of Supplies and Accounts. History of the Bureau of Supplies and Accounts in World War II: A Synopsis. 1947.

U.S. Department of the Navy, Bureau of Supplies and Accounts. Proceedings of BUSANDA Field Conference. November 1 - 5, 1954.

U.S. Department of the Navy, Bureau of Supplies and Accounts. Proceedings of the Navy Supply Conference. 1962.

U.S. Department of the Navy, Bureau of Supplies and Accounts. Proceedings of the 1963 Navy Supply Conference. 1963.

U.S. Department of the Navy, Bureau of Supplies and Accounts. Proceedings of the Navy Supply Conference. April 6 - 8, 1964.

U.S. Department of the Navy, Bureau of Supplies and Accounts. Proceedings of the 1965 Navy Supply Conference. 1965.

U.S. Department of the Navy, Bureau of Supplies and Accounts. Proceedings of the Supply Management Conference. October 6 - 10, 1952.

U.S. Department of the Navy, Bureau of Supplies and Accounts. Report of the Board to Survey Activities under Bureau of Supplies and Accounts Cognizance. January 15, 1947.

U.S. Department of the Navy, Bureau of Supplies and Accounts. Supply Support of the Navy. NAVSANDA Publication 340. September 15, 1957.

U.S. Department of the Navy. General Order No. 19. October 20, 1964.

U.S. Department of the Navy. Material Management Study. One of seven contributory studies to the Review of Management of the Department of the Navy, NAVEXOS P-2426B-4. November 2, 1962.

U.S. Department of the Navy, Naval Supply Center, Oakland. Command History. December 1958.

U.S. Department of the Navy, Naval Supply Systems Command. Logistics Organization Study. July 21, 1966.

U.S. Department of the Navy, Navy Logistic Support Task Force. Navy Logistic Support Improvement Plan. June 1965.

U.S. Department of the Navy. Report of the Committee on Organization of the Department of the Navy. 1959.

U.S. Department of the Navy. Report of the Special Committee Appointed by the Secretary of the Navy to Study the Navy's Supply System. April 1946.

U.S. Department of the Navy. Review of Management of the Department of the Navy (NAVEXOS P-2426A). December 15, 1962.

U.S. National Military Establishment, Munitions Board. Staff Report on Material Distribution Systems of the National Military Establishment. June 30, 1949.

U.S. Senate, Committee on Naval Affairs. Report on Unification of the War and Navy Departments and Postwar Organization for National Security. October 22, 1945.

Books

Adams, Gerard C. and Yoshpe, Harry B. (eds.). Supply Management. The Economics of National Security Series. Washington: Industrial College of the Armed Forces, 1965.

Dauten, Paul M., Jr. (ed.). Current Issues and Emerging Concepts in Management. Boston: Houghton Mifflin Company, 1962.

Funk & Wagnalls Standard College Dictionary. New York: Harcourt, Brace & World, 1966.

Furer, Julius Augustus. Administration of the Navy Department in World War II. Washington: U. S. Government Printing Office, 1959.

Rummel, V. F. and Ballaine, W. L. Research Methodology in Business. New York: Harper and Row, 1963.

Turabian, K. L. A Manual for Writers of Term Papers, Theses, and Dissertations. Chicago: The University of Chicago Press, 1965.

Young, Stanley. Management: A Systems Analysis. Glenview, Illinois: Scott, Foresman and Company, 1966.

Articles and Periodicals

Armed Forces Management. "NMC Organization 'Pins' Responsibilities," Vol. 12, (September 12, 1966), 71-77.

Crumpacker, John. "The Navy Supply System: Where It's Been, Where It's Going," Naval Review. Annapolis: United States Naval Institute, (1962), 264-275.

Hewes, James E., Jr. "Management vs. Bureaus," Marine Corps Gazette. Vol. 51 (February 1967).

Lovig, Lawrence. "Command of the Navy Supply System," U. S. Naval Institute Proceedings (January 1966).

MacDonald, Scot. "A Transition and New Tradition: The Navy Proposes Naval Material Command," Armed Forces Management. Vol. XII (April 1966), 40-47.

MacDonald, Scot. "How the Decisions Were Made: Exclusive, Inside Story of Navy Reorganization," Armed Forces Management. Vol. XII (May 1966), 74-79.

MacDonald,Scot. "NAVLOGSIP Promises an Improved Supply System for the Navy; Problems Being Solved," Armed Forces Management. Vol. XII (August 1966), 62-68.

U.S. Department of the Navy, Bureau of Supplies and Accounts. Monthly Newsletter. Vol. XIII, no. 10 (October 1949).

Unpublished Material

Beyer, Kenneth M. "Organization for Naval Material Management." Unpublished thesis, Industrial College of the Armed Forces, April 1966.

Beyer, Kenneth M. "Supply Functions in the Navy Technical Bureau." Unpublished professional paper on Supply Management, June 15, 1960.

Butler, Arthur G. "Development of Supply Support Missions for Activities of the Naval Shore Establishment." Unpublished paper on Supply Management, December 19, 1958.

Cuson, C. E. "The Changing Role of the Navy Supply System." Unpublished thesis, The School of Naval Command and Staff, U. S. Naval War College, 1966.

Hempstead, John W. "The Bureau of Supplies and Accounts." Case study, Department of Public Administration, American University, September 1950.

Petrie, Roland A. "The Bay Area Supply Support Pattern: An Analysis of Consolidation in an Era of Decentralization." Unpublished thesis, U. S. Naval Postgraduate School, 1965.

Rieve, Roland. "The Defense Supply Agency -- Background and Prospects." Unpublished thesis, Industrial College of the Armed Forces, February 26, 1962.

Other Sources

Boundy, James W. "Testimony Before the Committee on Organization of the Department of the Navy." 1958.

Dunlap and Associates, Inc. "The Navy Supply System Ashore." Working paper No. 2 under Contract No. NONR-3642(00). February 1, 1962.

Goldberg, H. J. "BUSANDA Problem Briefing." Presentation delivered at Chief of Naval Material Management Information Center. January 5, 1966.

Letter from the Chief, Bureau of Supplies and Accounts, serial L8-1(1-1)(OW), with enclosure entitled "A Study of an Integrated Naval Supply System," June 24, 1946.

Letter from the Chief of Naval Operations, serial 275P411, December 11, 1945.

Letter from the Chief of Naval Operations, serial 0078P411, January 5, 1946.

Letter from the Chief of Naval Operations, serial 300P411, February 21, 1946.

Letter from the Chief of Naval Operations, serial 1918P411, undated (written about December 1946).

Letter from the Chief of Naval Operations to the Chief of Naval Material, serial 84P41, February 23, 1966.

Letter from the Secretary of the Navy to the Chief of Naval Operations, February 14, 1947.

Memorandum from the Vice Chief of Naval Operations to the Deputy Chief of Naval Operations (Logistics), serial 3882P41, December 16, 1964.

U.S. Department of the Navy, Bureau of Supplies and Accounts. Working Papers from the Study of an Integrated Naval Supply System, 1946.

U.S. Department of the Navy, Naval Supply Systems Command. "Management of the Navy Supply System." Presentation to the NAVSUP Executive Board by Commander W. A. Chadwick, November 28, 1967.

U.S. Department of the Navy, Philadelphia Naval Shipyard. "Material Control Study of the Philadelphia Naval Shipyard," July 9, 1948.